Table of Contents

Grade 5

Grade 6

Grade 7

Grade 8

Grade 9-10

Grade 11-12

Louisiana Connectors for Science

Kindergarten

Grade 1

Grade 2

Grade 3

Grade 4

Grade 5

Grade 6

Grade 7

Grade 8

Chemistry

Earth Science

Environmental Science

Life Science

Physical Science

Physics

Resources

Example Essential Elements Cards for Mathematics and English Language Arts

Adapting Lesson Plans for Students with Significant Disabilities

Student Response Modes

Example Case Studies for Students with Significant Disabilities

Background

This document overviews the rationale for the Louisiana Connectors for Students with Significant Disabilities, details how they were developed to align with the Louisiana Student Standards in English language arts, mathematics, and science, and outlines implementation guidance for districts, schools, and teachers to use in creating equitable educational opportunities for all students.

Rationale and Purpose

Over the past 50 years, the history of education for students with significant disabilities has been one of expanded services and increasing levels of inclusion. Prior to 1975, countless students with disabilities did not have the opportunity to learn in a public-school setting. Then, the Education for All Handicapped Children Act of 1975 was enacted, guaranteeing a free and appropriate education for all students. As time went on, further amendments and legislation were added to ensure early intervention services (1986), the inclusion of students with autism and traumatic brain injuries (1990), and transition services (1997). In 2004, the reauthorization of the Individuals with Disabilities Education Improvement Act took place and expanded guarantees for students with disabilities even further. As recently as March 2017, the Supreme Court ruled that school districts must do more than provide a "merely more than *de minimis*" education program to students with disabilities. In its unanimous decision, the Court held that an Individualized Education Plan "must be appropriately ambitious" to meet the requirements of IDEA and support students with disabilities to achieve grade-level advancement.

Keeping pace with the law, educational research and best practice have demonstrated that students with even the most significant disabilities are capable of learning much more academic content than once thought possible (Hudson, Browder, & Wood, 2013; Spooner, Knight, Browder, & Smith, 2012). Since the highest academic expectation for any student is that he or she will meet grade-level expectations, students with disabilities should – whenever possible – have the same opportunity to reach grade-level achievement articulated for all students.

Development of the Louisiana Connectors

With the adoption of the Louisiana Student Standards in Spring 2016, Louisiana's Extended Standards and assessments for students with significant disabilities required update and alignment. The Louisiana Department of Education (LDOE) met with a diverse group of stakeholders to develop a draft set of aligned learning expectations for these students. In addition, the LDOE completed a comparative

analysis of the Louisiana Student Standards, the Louisiana Extended Standards, and the work of national models, including the National Center and State Collaborative (NCSC).[1]

The analysis showed that there is general, though not complete, alignment between the Louisiana Student Standards and national models for alternative achievement standards in ELA and math. Where discrepancies were found, edits were recommended to ensure full alignment to the Louisiana Student Standards. The LDOE sought feedback from Louisiana stakeholders who were encouraged to review draft proposals and provide feedback.

On December 6, 2016, BESE approved revisions to Bulletin 127 (insert title of bulletin), which outlines the learning expectations for students with significant disabilities as defined by those students meeting the alternative assessment eligibility criteria These Louisiana Connectors are fully aligned to the Louisiana Student Standards for English language arts and mathematics.

When BESE approved the Louisiana Student Standards in Science in spring 2017, a parallel process was adopted for the creation of aligned Louisiana Connectors for students with significant disabilities in science. In the instance of science, there were no nationally-accepted models of extended standards from which to draw. The LDOE contracted with edCount, an organization with experience working on the NCSC project developing and evaluating the assessment system for English language arts and mathematics, as well as the lead designer on the Core Content Connectors aligned to state science academic standards for California, Tennessee, and South Dakota. Together with LDOE staff and a panel of special education and science content experts from across the state of Louisiana, several iterations of the Science Connectors went through several iterations. Once more, the LDOE sought feedback from Louisiana stakeholders who reviewed draft proposals and provided feedback.

The Louisiana Connectors in English language, mathematics, and science provide developmentally-appropriate content for all grades and courses while maintaining high expectations for all students. While maintaining alignment with typical grade-level expectations, the Louisiana Connectors accentuate the “big ideas” found in English language arts and mathematics standards. The previous Extended Standards, developed for students eligible for alternate assessment participation, stood separate and apart from the expectations for students without disabilities. The Louisiana Connectors now provide fully-aligned pathways for students with significant disabilities to work toward Louisiana Student Standards.

Implementation

The Louisiana Connectors call for greater alignment between what general educators and specialist teachers teach. These changes can be addressed with sensible adjustments to curriculum, training, and

[1] The LDOE has drawn extensively from the work of the National Center and State Collaborative (NCSC) in developing the Louisiana Connectors and related resources. We are indebted to their work. For more information, please use the following link to the NCSC website.

testing; they will also require focused efforts on behalf of teachers and administrators to adopt the Louisiana Connectors and put them into practice.

The LDOE has developed instructional materials for teachers to use with students with significant disabilities who are eligible for alternate assessment participation. The resources focus on planning English language arts and mathematics instruction while aligning to students' individual needs and grade-level expectations. These resources are found at the end of this document.

Reading the Louisiana Connectors

The Louisiana Connectors are fully aligned to the Louisiana Student Standards. As such, whereas the Louisiana Student Standard code has three parts (strand, grade level, standard number), each separated by a period, the Louisiana Connectors add the prefix to denote that these are the recommended standards for students with significant disabilities. And, if the Louisiana Connector is subdivided, the Connectors use letters to denote the subdivisions. Examples from mathematics, English language arts and science are below.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.NS.A.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers, show that the decimal expansion repeats eventually. Convert a decimal expansion that repeats eventually into a rational number by analyzing repeating patterns.	**LC.8.NS.A.1a** Identify π as an irrational number. **LC.8.NS.A.1b** Round irrational numbers to the hundredths place.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	**LC.RL.3.1a** Answer questions related to the relationship between characters, setting, events, or conflicts (e.g., characters and events, characters and conflicts, setting and conflicts). **LC.RL.3.1b** Answer literal questions and refer to text to support your answer. **LC.RL.3.1c** Support inferences, opinions, and conclusions using evidence from the text including illustrations.

Grade 6 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-ESS1-1 Develop and use a model of the Earth-sun-moon system to describe the reoccurring patterns of lunar phases, eclipses of the sun and moon, and seasons.	**LC-6-MS-ESS1-1a** Use an Earth-sun-moon model to show that the Earth-moon system orbits the sun once an Earth year and the orbit of the moon around Earth corresponds to a month.
	LC-6-MS-ESS1-1b Use an Earth-sun-moon model to explain eclipses of the sun and the moon.
	LC-6-MS-ESS1-1c Use an Earth-sun-moon model to explain how variations in the amount of the sun's energy hitting Earth's surface results in seasons.

Kindergarten Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
K.CC.A.1 Count to 100 by ones and by tens.	**LC.K.CC.A.1a** Rote count up to 10. **LC.K.CC.A.1b** Rote count up to 31. **LC.K.CC.A.1c** Rote count up to 100.
K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	**LC.K.CC.A.2** Count forward beginning from any given number below 10.
K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	**LC.K.CC.A.3a** Identify numerals 1-10. **LC.K.CC.A.3b** Identify the numerals 1-10 when presented the name of the number. **LC.K.CC.A.3c** Write or select the numerals 1-10. **LC.K.CC.A.3d** Match the numeral to the number of objects in a set.
K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects in standard order, say the number names as they relate to each object in the group, demonstrating one-to-one correspondence. b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one larger.	**LC.K.CC.B.4** Use manipulatives (e.g., counters, blocks) to count up to 10 objects by matching one number per object.

Kindergarten Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
K.CC.B.5 Count to answer "How many?" questions. a. Count objects up to 20, arranged in a line, a rectangular array, or a circle. b. Count objects up to 10 in a scattered configuration. c. When given a number from 1-20, count out that many objects	**LC.K.CC.B.5** Count up to 10 objects in a line, rectangle, or array.
K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	**LC.K.CC.C.6** Identify the set that has more.
K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.	**LC.K.CC.C.7** Identify the smaller or larger number given 2 numbers between 0-10.
K.OA.A.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	**LC.K.OA.A.1a** Use objects or pictures to respond appropriately to "add __" and "take away ___." **LC.K.OA.A.1b** Communicate answer after adding or taking away.
K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	**LC.K.OA.A.2a** Solve one step addition and subtraction word problems, and add and subtract within 10 using objects, drawings, pictures. **LC.K.OA.A.2b** Solve word problems within 10**.**
K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).	**LC.K.OA.A.3** Decompose a set of up to 10 objects into a group; count the quantity in each group**.**

Kindergarten Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	**LC.K.OA.A.4** For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record or select the answer.
K.OA.A.5 Fluently add and subtract within 5.	**LC.K.OA.A.5** Add and subtract within 5 using manipulatives.
K.NBT.A.1 Gain understanding of place value. a. Understand that the numbers 11–19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. b. Compose and decompose numbers 11 to 19 using place value (e.g., by using objects or drawings). c. Record each composition or decomposition using a drawing or equation (e.g., 18 is one ten and eight ones, 18 = 1 ten + 8 ones, 18 = 10 + 8).	**LC.K.NBT.A.1** Build representations of numbers up to 19 by creating a group of 10 and some 1s (e.g., 13 = one 10 and three 1s).
K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	**LC.K.MD.A.1** Describe objects in terms of measurable attributes (longer, shorter, heavier, lighter…).
K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*	**LC.K.MD.A.2** Compare 2 objects with a measurable attribute in common to see which object has more/less of the attribute (length, height, weight).
K.MD.B.3 Classify objects into given categories based on their attributes; count the number of objects in each category; sort categories by quantity.	**LC.K.MD.B.3** Sort objects by characteristics (e.g., big/little, colors, shapes, etc.).

Kindergarten Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
K.MD.C.4 Recognize pennies, nickels, dimes, and quarters by name and value (e.g., This is a nickel and it is worth 5 cents.).	**LC.K.MD.C.4** Recognize pennies, nickels, dimes, and quarters by name and value (e.g., This is a nickel and it is worth 5 cents.).
K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.	**LC.K.G.A.1** Use spatial language (e.g., above, below, etc.) to describe two-dimensional shapes.
K.G.A.2 Correctly name shapes regardless of their orientations or overall size.	**LC.K.G.A.2a** Recognize two- dimensional shapes (e.g., circle, square, triangle, rectangle) regardless of orientation or size. **LC.K.G.A.2b** Recognize two-dimensional shapes in environment regardless of orientation or size.
K.G.A.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	**LC.K.G.A.3a** Identify shapes as two-dimensional (lying flat) or three-dimensional (solid). **LC.K.G.A.3b** Distinguish two-dimensional shapes based upon their defining attributes (i.e., size, corners, and points).
K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	**LC.K.G.B.4** Use informal language to describe how two shapes are similar and/or different.
K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	**LC.K.G.B.5** Uses three dimensional objects (blocks, sticks, balls) to model shapes in the world.

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
Counting and Cardinality is NOT a domain in the Grade 1 Louisiana Student Standards; however, it has been added to the Louisiana Connectors to allow students to further progress in these skills.	**Counting and Cardinality: Understand the relationship between numbers and quantities.** **LC.1.CC.1a** Use a number line to count up to 31 objects by matching 1 object per number.
	Counting and Cardinality: Write numbers from 0-31 and represent a number of objects with a written numeral. **LC.1.CC.1b** Identify numerals 0-31. **LC.1.CC.1c** Identify the numeral up to 31 when presented the name. **LC.1.CC.1d** Write or select the numerals 0-31. **LC.1.CC.1e** Recognize zero as representing none or no objects.
	Counting and Cardinality: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. **LC.1.CC.1f** Compare 2 sets and identify the set that is either greater than or less than the other set. **LC.1.CC.1g** Order up to 3 sets that have up to 10 objects in each set. **LC.1.CC.1h** Order up to 3 sets with up to 20 objects in each set.
	Counting and Cardinality: Compare two numbers between 0 and 31 presented as written numerals. **LC.1.CC.1i** Order up to 3 numbers up to 31. **LC.1.CC.1j** Identify the smaller or larger number given 2 numbers between 0-31.

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	**LC.1.OA.A.1a** Use manipulatives or representations to write simple addition or subtraction equations within 20 based upon a word problem. **LC.1.OA.A.1b** Solve word problems within 20. **LC.1.OA.A.1c** Using objects or pictures respond appropriately to "add __" and "take away ___." **LC.1.OA.A.1d** Solve one step addition and subtraction word problems where the change or result is unknown (4 + _ = 7) or (4 + 3 = __), within 20 using objects, drawings, pictures.
1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	**LC.1.OA.A.2** Solve word problems that call for addition of two or three numbers whose sum is less than or equal to 20 by using objects t and drawings.
1.OA.B.3 Apply properties of operations to add and subtract. *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*	**LC.1.OA.B.3a** Recognize zero as an additive identity. **LC.1.OA.B.3b** Use commutative properties to solve addition problems with sums up to 20 (e.g., 3 + 8 = 11 therefore 8 + 3 = __). **LC.1.OA.B.3c** Use associative property to solve addition problems with sums up to 20.
1.OA.B.4 Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*	**LC.1.OA.B.4** Subtract within 20 by using the strategy of an unknown addend. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	**LC.1.OA.C.5a** Decompose a set of up to 20 objects into a group; count the quantity in each group. **LC.1.OA.C.5b** Count 2 sets to find sums up to 20.
1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use mental strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	**LC.1.OA.C.6** Add and subtract within 20 supported by the use of manipulatives.
1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*	**LC.1.OA.D.7a** Identify and apply addition and equal signs. **LC.1.OA.D.7b** Label simple equations as = or with the phrase not equal. **LC.1.OA.D.7c** Identify and apply addition, subtraction, and equal signs.
1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.*	**LC.1.OA.D.8** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.*
1.NBT.A.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	**LC.1.NBT.A.1a** Rote count up to 31. **LC.1.NBT.A.1b** Rote count up to 100.

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones—called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	**LC.1.NBT.B.2a** Build representations of numbers up to 19 by creating a group of 10 and some 1s (e.g., 13 = one 10 and three 1s). **LC.1.NBT.B.2b** Identify the value of the numbers in the tens and ones place within a given number up to 31.
1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	**LC.1.NBT.B.3** Compare two digit numbers up to 31 using representations and numbers (e.g., identify more tens, less tens, more ones, less ones, larger number, smaller number).
1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10. a. Use concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a number sentence; justify the reasoning used with a written explanation. b. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	**LC.1.NBT.C.4a** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10. **LC.1.NBT.C.4b** Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	**LC.1.NBT.C.5** Mentally add or subtract 10 from a given two-digit number without having to count.

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1.NBT.C.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	**LC.1.NBT.C.6** Mentally add or subtract 10 from a given set from the 10s family (e.g., what is 10 more than 50? What is 10 less than 70?).
1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	**LC.1.MD.A.1** Order three objects by length; compare the lengths of two objects indirectly by using a third object.
1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*	**LC.1.MD.A.2a** Measure using copies of one object to measure another. **LC.1.MD.A.2b** Express length of an object as a whole number of lengths unit by laying multiple copies of a shorter object end to end. **LC.1.MD.A.2c** Compare two units of measurement and identify which unit would require more or less when measuring a selected object (e.g., I can measure with paper clips or markers, which unit will require more to measure the table?).
1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.	**LC.1.MD.B.3a** Use time to sequence up to three events, using a digital or analog clock. **LC.1.MD.B.3b** Tell time to the nearest ½ hour using digital clocks.

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	**LC.1.MD.C.4a** Select questions that ask about "How many" and represent up to three categories that can be concretely represented. **LC.1.MD.C.4b** Identify 2 categories resulting from a selected question. **LC.1.MD.C.4c** Analyze data by sorting into 2 categories; answer questions about the total number of data points and how many in each category. **LC.1.MD.C.4d** Using a picture graph, represent each object/person counted on the graph (1:1 correspondence) for 2 or more categories. **LC.1.MD.C.4e** Interpret a picture graph to answer questions about how many in each category. **LC.1.MD.C.4f** Select a question about three attributes that can be concretely represented. **LC.1.MD.C.4g** Identify up to three categories resulting from a selected question.
1.MD.D.5 Determine the value of a collection of coins up to 50 cents. (Pennies, nickels, dimes, and quarters in isolation; not to include a combination of different coins.)	**LC.1.MD.D.5** Determine the value of a collection of coins up to 50 cents. (Pennies, nickels, dimes, and quarters in isolation; not to include a combination of different coins.)
1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes that possess defining attributes.	**LC.1.G.A.1** Distinguish two-dimensional shapes based upon their defining attributes (i.e., size, corners, and points).

Grade 1 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) and three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	**LC.1.G.A.2** Compose two- and three-dimensional shapes.
1.G.A.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters,* and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	**LC.1.G.A.3** Partition circles and rectangles into 2 and 4 equal parts.

Grade 2 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	**LC.2.OA.A.1a** Represent addition of two sets when shown the + symbol. **LC.2.OA.A.1b** Solve word problems within 20. **LC.2.OA.A.1c** Solve word problems within 100. **LC.2.OA.A.1d** Solve one- or two-step addition and subtraction problems, and add and subtract within 100, using objects, drawings, pictures. **LC.2.OA.A.1e** Use pictures, drawings or objects to represent the steps of a problem.
2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers.	**LC.2.OA.B.2** Add and subtract within 20 using manipulatives.
2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	**LC.2.OA.C.3** Identify numbers as odd or even.
2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	**LC.2.OA.C.4a** Find the total number of objects when given the number of identical groups and the number of objects in each group, neither number larger than 5. **LC.2.OA.C.4b** Find the total number inside an array with neither number in the columns or rows larger than 5.

Grade 2 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens—called a "hundred." b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). c.	**LC.2.NBT.A.1a** Build representations of two digit numbers using tens and ones. **LC.2.NBT.A.1b** Build representations of three digit numbers using hundreds, tens and ones. **LC.2.NBT.A.1c** Build representations of numbers using hundreds, tens and ones.
2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.	**LC.2.NBT.A.2a** Skip count by 5s. **LC.2.NBT.A.2b** Skip count by 10s. **LC.2.NBT.A.2c** Skip count by 100s.
2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	**LC.2.NBT.A.3a** Identify numerals 0-100. **LC.2.NBT.A.3b** Identify the numeral between 0 and 100 when presented the name. **LC.2.NBT.A.3c** Write or select the numerals 0-100. **LC.2.NBT.A.3d** Write or select expanded form for any two digit number. **LC.2.NBT.A.3e** Write or select expanded form for any three digit number. **LC.2.NBT.A.3f** Explain what the zero represents in place value (hundreds, tens, ones) in a number. **LC.2.NBT.A.3g** Write or select the expanded form for up to three digit number.

Grade 2 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	**LC.2.NBT.A.4a** Compare (greater than, less than, equal to) two numbers up to 100. **LC.2.NBT.A.4b** Compare two digit numbers using representations and numbers (e.g., identify more tens, less tens, more ones, less ones, larger number, smaller number). **LC.2.NBT.A.4c** Compare three digit numbers using representations and numbers (e.g., identify more hundreds, less hundreds, more tens, less tens, more ones, less ones, larger number, smaller number).
2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	**LC.2.NBT.B.5a** Model addition and subtraction with base 10 blocks within 20. **LC.2.NBT.B.5b** Model addition and subtraction with base 10 blocks within 50. **LC.2.NBT.B.5c** Model addition and subtraction with base 10 blocks within 100.
2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.	**LC.2.NBT.B.6** Combine up to 3 sets of 20 or less.
2.NBT.B.7 Add and subtract within 1000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; justify the reasoning used with a written explanation. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	**LC.2.NBT.B.7a** Compose ones into tens and/or tens into hundreds in addition situation. **LC.2.NBT.B.7b** Decompose tens into ones and/or hundreds into tens in subtraction situations. **LC.2.NBT.B.7c** Use diagrams and number lines to solve addition or subtraction problems.

Grade 2 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2.NBT.B.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	**LC.2.NBT.B.8a** Mentally add or subtract 10 from a given set from the 10s family (e.g., what is 10 more than 50? What is 10 less than 70?). **LC.2.NBT.B.8b** Mentally add or subtract 100 from a given set from the 100s family (e.g., what is 100 more than 500? What is 100 less than 700?). **LC.2.NBT.B.8c** Mentally add or subtract 100 from a given set from the 100s family (e.g., what is 100 more than 500? What is 100 less than 700?).
2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.	No Louisiana Connectors written for this standard.
2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	**LC. 2.MD.A.1a** Select appropriate tool and unit of measurement to measure an object (ruler or yard stick; inches or feet). **LC. 2.MD.A.1b** Select appropriate tools and demonstrate or identify appropriate measuring techniques.
2.MD.A.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	**LC.2.MD.A.2** Measure the length of an object using two different size units.
2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters.	**LC.2.MD.A.3a** Recognize that standard measurement units can be decomposed into smaller units. **LC.2.MD.A.3b** Estimate the length of an object using units of feet and inches.
2.MD.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	**LC.2.MD.A.4** Measure two objects with each no more than 10 inches long and find the difference in their lengths.

Grade 2 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	**LC.2.MD.B.5a** Solve one-step subtraction problems involving the difference of the lengths of two objects in standard length units. **LC.2.MD.B.5b** Solve word problems involving the difference in standard length units.
2.MD.B.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, …, and represent whole-number sums and differences within 100 on a number line diagram.	**LC.2.MD.B.6** Use diagrams and number lines to solve addition or subtraction problems.
2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	**LC.2.MD.C.7** Tell time to the nearest 5 minutes using a digital clock.
2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*	**LC.2.MD.C.8** Solve word problems using dollar bills, quarters, dimes, nickels, or pennies.
2.MD.D.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	**2.MD.D.9** Organize data by representing continuous data on a line plot.

Grade 2 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	**LC.2.MD.D.10a** Analyze data by sorting into categories established by each question. **LC.2.MD.D.10 b** Organize data by representing categorical data on a pictorial graph or bar graph. **LC.2.MD.D.10c** Identify the value of each category represented on picture graph and bar graph or each point on a line plot. **LC.2.MD.D.10d** Compare the information shown in a bar graph or picture graph with up to four categories. Solve simple comparisons of how many more or how many less.
2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	**LC.2.G.A.1a** Identify two-dimensional shapes such as rhombus, pentagons, hexagons, octagon, ovals, equilateral, isosceles, and scalene triangles. **LC.2.G.A.1b** Distinguish two- or three-dimensional shapes based upon their attributes (i.e., # of sides, equal or different lengths of sides, # of faces, # of corners). **LC.2.G.A.1c** Draw two-dimensional shapes with specific attributes.
2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	**LC.2.G.A.2** Find the total number of same size squares by counting when the number of rows and columns in a given array is 5 or less.
2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, *a third of*, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	**LC.2.G.A.3a** Partition circles and rectangles into two and four equal parts. **LC.2.G.A.3b** Label a partitioned shape (e.g., one whole rectangle was separated into two halves, one whole circle was separated into three thirds).

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.OA.A.1 Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as* 5 × 7.	**LC.3.OA.A.** Describe a context in which a total number of objects can be expressed as product of two one-digit numbers.
3.OA.A.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *For example, describe a context in which a number of shares or a number of groups can be expressed as* 56 ÷ 8.	**LC.3.OA.A.2** Describe a context in which a number of shares or a number of groups can be expressed as a division problem.
3.OA.A.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	**LC.3.OA.A.3a** Use objects to model multiplication and division situations involving up to 5 groups with up to 5 objects in each group and interpret the results. **LC.3.OA.A.3b** Use objects to model multiplication and division situations involving up to 10 groups with up to 5 objects in each group and interpret the results.
3.OA.A.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = □ ÷ 3, 6 × 6 = ?.*	**LC.3.OA.A.4a** Find total number inside an array with neither number in the columns or rows larger than 10. **LC.3.OA.A.4b** Determine how many objects go into each group when given the total number of objects and the number of groups where the number in each group or number of groups is not greater than 10.

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.OA.B.5 Apply properties of operations as strategies to multiply and divide. *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*	**LC.3.OA.B.5** Apply properties of operations as strategies to multiply and divide.
3.OA.B.6 Understand division as an unknown-factor problem. *For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.*	**LC.3.OA.B.6a** Determine how many objects go into each group when given the total number of objects and the number of groups where the number in each group or number of groups is not greater than 5. **LC.3.OA.B.6b** Determine the number of groups given the total number of objects and the number of objects in each group where the number in each group and the number of groups is not greater than 5.
3.OA.C.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	**LC.3.OA.C.7a** Find the total number of objects when given the number of identical groups and the number of objects in each group, neither number larger than 5. **LC.3.OA.C.7b** Find the total number inside an array with neither number in the columns or rows larger than 5. **LC.3.OA.C.7c** Solve multiplication problems with neither number greater than 5.
3.OA.D.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	**LC.3.OA.D.8a** Use rounding to solve word problems. **LC.3.OA.D.8b** Solve or solve and check one or two step word problems requiring addition, subtraction or multiplication with answers up to 100.

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	**LC.3.OA.D.9a** Describe the rule for a numerical pattern (e.g., increase by 2, 5 or 10). **LC.3.OA.D.9b** Select or name the three next terms in a numerical pattern where numbers increase by 2, 5 or 10. **LC.3.OA.D.9c** Identify multiplication patterns in a real word setting.
3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	**LC.3.NBT.A.1** Use place value to round to the nearest 10 or 100.
3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	**LC.3.NBT.A.2a** Use the relationships between addition and subtraction to solve problems. **LC.3.NBT.A.2b** Solve multi-step addition and subtraction problems up to 100. **LC.3.NBT.A.2c** Solve multi-digit addition and subtraction problems up to 1000.
3.NBT.A.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.	**LC.3.NBT.A.3** Multiply a multiple of 10 in the range of 10-90 by a one digit whole number.

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.NF.A.1 Understand a fraction 1/*b*, with denominators 2, 3, 4, 6, and 8, as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*.	**LC.3.NF.A.1a** Identify the number of highlighted parts (numerator) of a given representation (rectangles and circles). **LC.3.NF.A.1b** Identify the total number of parts (denominator) of a given representation (rectangles and circles). **LC.3.NF.A.1c** Identify the fraction that matches the representation (rectangles and circles; halves, fourths, thirds, eighths). **LC.3.NF.A.1d** Identify that a part of a rectangle can be represented as a fraction that has a value between 0 and 1. **LC.3.NF.A.1e** Select a model of a given fraction (halves, thirds, fourths, sixths, eighths). **LC.3.NF.A.1f** Using a representation, decompose a fraction into multiple copies of a unit fraction (e.g., ¾ = ¼ + ¼ + ¼).
3.NF.A.2 Understand a fraction with denominators 2, 3, 4, 6, and 8 as a number on a number line diagram. a. Represent a fraction 1/ b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	**LC.3.NF.A.2a** Locate given common unit fractions (i.e., $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$) on a number line or ruler. **LC.3.NF.A.2b** Locate fractions on a number line. **LC.3.NF.A.2c** Order fractions on a number line.

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.NF.A.3 Explain equivalence of fractions with denominators 2, 3, 4, 6, and 8 in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.* d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**LC.3.NF.A.3a** Use =, <, or > to compare two fractions with the same numerator or denominator. **LC.3.NF.A.3b** Express whole numbers as fractions. **LC.3.NF.A.3c** Determine equivalent fractions.
3.MD.A.1 Understand time to the nearest minute. a. Tell and write time to the nearest minute and measure time intervals in minutes, within 60 minutes, on an analog and digital clock. b. Calculate elapsed time greater than 60 minutes to the nearest quarter and half hour on a number line diagram. c. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	**LC.3.MD.A.1a** Solve word problems involving the addition and subtraction of time intervals of whole hours or within an hour (whole hours: 5:00 to 8:00, within hours: 7:15 to 7:45). **LC.3.MD.A.1b** Determine the equivalence between number of minutes and the fraction of the hour (e.g., 30 minutes = ½ hour). **LC.3.MD.A.1c** Determine the equivalence between the number of minutes and the number of hours (e.g., 60 minutes = 1 hour).

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	**LC.3.MD.A.2a** Add to solve one-step word problems. **LC.3.MD.A.2b** Estimate liquid volume. **LC.3.MD.A.2c** Select appropriate units for measurement(liquid volume, mass). **LC.3.MD.A.2d** Select appropriate tools for measurement(liquid volume, mass). **LC.3.MD.A.2e** Determine whether a situation calls for a precise measurement or an estimation.
3.MD.B.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*	**LC.3.MD.B.3a** Collect data, organize into picture or bar graph. **LC.3.MD.B.3b** Select the appropriate statement that describes the data representations based on a givens scaled picture or bar graph.
3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	**LC.3.MD.B.4a** Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. **LC.3.MD.B.4b** Measure to solve problems using number lines and ruler to 1 inch, ½ inch, or ¼ of an inch. **LC.3.MD.B.4c** Organize measurement data into a line plot.
3.MD.C.5 Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.	**LC.3.MD.C.5a** Select a square from pictures as the appropriate unit for measuring area. **LC.3.MD.C.5b** Select a picture which correctly shows how to place squares to measure the area of a rectangle.
3.MD.C.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**LC.3.MD.C.6** Measure area of rectangles by counting squares.

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.MD.C.7 Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. ~~c.~~ Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.	**LC.3.MD.C.7a** Use tiling and addition to determine area. **LC.3.MD.C.7b** Multiply side lengths to find the area of a rectangle with whole number side lengths to solve problems. **LC.3.MD.C.7c** Use tiling and multiplication to determine area. **LC.3.MD.C.7d** Apply the distributive property to solve problems with models.
3.MD.D.8 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	**LC.3.MD.D.8a** Identify a figure as getting larger or smaller when the dimensions of the figure change. **LC.3.MD.D.8b** Use addition to find the perimeter of a rectangle. **LC.3.MD.D.8c** Solve real world problems involving perimeter.
3.MD.E.9 Solve word problems involving pennies, nickels, dimes, quarters, and bills greater than one dollar, using the dollar and cent symbols appropriately.	**LC.3.MD.E.9** Solve word problems using bills greater than one dollar, quarters, dimes, nickels, or pennies.

Grade 3 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3.G.A.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	**LC.3.G.A.1** Identify shared attributes of shapes.
3.G.A.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as $1/4$ of the area of the shape.*	**LC.3.G.A.2** Partition rectangles into equal parts with equal area.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.OA.A.1 Interpret a multiplication equation as a comparison and represent verbal statements of multiplicative comparisons as multiplication equations, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7, and 7 times as many as 5.	**LC.4.OA.A.1** Use objects to model multiplication and division situations involving up to 5 groups with up to 5 objects in each group and interpret the results.
4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and/or equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison (Example: 6 times as many vs 6 more than).	**LC.4.OA.A.2a** Determine how many objects go into each group when given the total number of objects and the number of groups where the number in each group or number of groups is not greater than 10. **LC.4.OA.A.2b** Solve multiplicative comparisons with an unknown using up to 2-digit numbers with information presented in a graph or word problem (e.g., an orange hat cost $3. A purple hat cost 2 times as much. How much does the purple hat cost? [3 x 2 = *p*]).
4.OA.A.3 Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. *Example: Twenty-five people are going to the movies. Four people fit in each car. How many cars are needed to get all 25 people to the theater at the same time?*	**LC.4.OA.A.3a** Solve or solve and check one or two step word problems requiring addition, subtraction or multiplication with answers up to 100. **LC.4.OA.A.3b** Solve problems or word problems using up to three digit numbers and addition or subtraction or multiplication.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.OA.B.4 Using whole numbers in the range 1–100, a. Find all factor pairs for a given whole number. b. Recognize that a given whole number is a multiple of each of its factors. c. Determine whether a given whole number is a multiple of a given one-digit number. d. Determine whether a given whole number is prime or composite.	**LC.4.OA.B.4** Identify multiples for a whole number (e.g., 2= 2, 4, 6, 8, 10).
4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*	**LC.4.OA.C.5a** Generate a pattern when given a rule and word problem. (I run 3 miles every day, how many miles have I run in 3 days). **LC.4.OA.C.5b** Extend a numerical pattern when the rule is provided. **LC.4.OA.C.5c** Generate a pattern that follows the provided rule.
4.NBT.A.1 Recognize that in a multi-digit whole number less than or equal to 1,000,000, a digit in one place represents ten times what it represents in the place to its right. *Examples: (1) recognize that 700 ÷ 70 = 10; (2) in the number 7,246, the 2 represents 200, but in the number 7,426 the 2 represents 20, recognizing that 200 is ten times as large as 20, by applying concepts of place value and division.*	**LC.4.NBT.A.1** Compare the value of a number when it is represented in different place values of two 3 digit numbers.
4.NBT.A.2 Read and write multi-digit whole numbers less than or equal to 1,000,000 using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	**LC.4.NBT.A.2a** Compare multi-digit numbers using representations and numbers. **LC.4.NBT.A.2b** Write or select the expanded form for a multi-digit number.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.NBT.A.3 Use place value understanding to round multi-digit whole numbers, less than or equal to 1,000,000, to any place.	**LC.4.NBT.A.3** Use place value to round to any place (i.e., ones, tens, hundreds, thousands).
4.NBT.B.4 Use place value understanding to round multi-digit whole numbers, less than or equal to 1,000,000, to any place.	**LC.4.NBT.B.4** Solve multi-digit addition and subtraction problems up to 1000.
4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	**LC.4.NBT.B.5a** Solve multiplication problems up to two digits by one digit. **LC.4.NBT.B.5b** Solve a 2-digit by 1-digit multiplication problem using 2 different strategies.
4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	**LC.4.NBT.B.6** Separate a group of objects into equal sets when given the number of sets to find the total in each set with the total number less than 50.
4.NF.A.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. (Denominators are limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100.)	**LC.4.NF.A.1** Determine equivalent fractions.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.NF.A.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. (Denominators are limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100.)	**LC.4.NF.A.2a** Use =, <, or > to compare 2 fractions (fractions with a denominator or 10 or less). **LC.4.NF.A.2b** Compare up to 2 given fractions that have different denominators.
4.NF.B.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. (Denominators are limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100.) a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. *Example: 3/4 = 1/4 + 1/4 + 1/4*. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples:* $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$. c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	**LC.4.NF.B.3a** Using a representation, decompose a fraction into multiple copies of a unit fraction (e.g., ¾ = ¼ + ¼ + ¼). **LC.4.NF.B.3b** Add and subtract fractions with like denominators of (2, 3, 4, or 8). **LC.4.NF.B.3c** Add and subtract fractions with like denominators (2, 3, 4, or 8) using representations. **LC.4.NF.B.3d** Solve word problems involving addition and subtraction of fractions with like denominators (2, 3, 4, or 8).

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.NF.B.4 Multiply a fraction by a whole number. (Denominators are limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100.) a. Understand a fraction a/b as a multiple of 1/b. *For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4).* b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)* c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?*	**LC.4.NF.B.4** Multiply a fraction by a whole or mixed number.
4.NF.C.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.*	**LC.4.NF.C.5** Find the equivalent decimal for a given fraction with a denominator of 10 or 100.
4.NF.C.6 Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram; represent 62/100 of a dollar as $0.62.*	**LC.4.NF.C.6a** Match a fraction with a denominator of 10 or 100 as a decimal (5/10 = .5). **LC.4.NF.C.6b** Read, write or select decimals to the tenths place. **LC.4.NF.C.6c** Read, write or select decimals to the hundredths place.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.NF.C.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	**LC.4.NF.C.7a** Use =, <, or > to compare 2 decimals (decimals in multiples of 10). **LC.4.NF.C.7b** Compare two decimals to the tenths place with a value of less than 1. **LC.4.NF.C.7c** Compare two decimals to the hundredths place with a value of less than 1.
4.MD.A.1 Know relative sizes of measurement units within one system of units, including: ft, in; km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. (Conversions are limited to one-step conversions.) *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), …*	**LC.4.MD.A.1a** Complete a conversion table for length and mass within a single system. **LC.4.MD.A.1b** Identify the appropriate units of measurement for different purposes in a real life context (e.g., measure a wall using feet, not inches).
4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving whole numbers and/or simple fractions (addition and subtraction of fractions with like denominators and multiplying a fraction times a fraction or a whole number), and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	**LC.4.MD.A.2a** Use the four operations to solve word problems involving distance, time, mass, and money and problems that require conversions from one unit to a smaller unit. **LC.4.MD.A.2b** Select appropriate units for measurement (length, liquid volume, time, money).
4.MD.A.3 Apply the area and perimeter formulas for rectangles in real-world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*	**LC.4.MD.A.3** Solve word problems using perimeter and area where changes occur to the dimensions of a figure.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.MD.B.4 Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*	**LC.4.MD.B.4a** Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). **LC.4.MD.B.4b** Solve problems involving addition and subtraction of fractions with like denominators by using information presented in line plots.
4.MD.C.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where two rays intersect the circle. b. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. c. An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees. d.	**LC.4.MD.C.5** Recognize an angle in two-dimensional figures.
4.MD.C.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	**LC.4.MD.C.6a** Use a protractor or angle ruler to sketch a given angle. **LC.4.MD.C.6b** Measure right angles using a tool (e.g., angle ruler, protractor).
4.MD.C.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a letter for the unknown angle measure.	**LC.4.MD.C.7** Given a picture of a right angle divided into two angles, find the measure of the missing angle when given the measure of one of the two angles.

Grade 4 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4.MD.D.8 Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.	**LC.4.MD.D.8a** Match an accurate addition and multiplication equation to a representation. **LC.4.MD.D.8b** Apply the formulas for area and perimeter to solve real world problems. **LC.4.MD.D.8c** Apply the distributive property to solve problems with models.
4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	**LC.4.G.A.1a** Recognize a point, line and line segment, rays in two-dimensional figures. **LC.4.G.A.1b** Recognize perpendicular and parallel lines in two-dimensional figures. **LC.4.G.A.1c** Recognize an angle in two-dimensional figures.
4.G.A.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	**LC.4.G.A.2a** Classify two-dimensional shapes based on attributes (# of angles). **LC.4.G.A.2b** Categorize angles as right, acute, or obtuse. **LC.4.G.A.2c** Identify a right triangle.
4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	**LC.4.G.A.3** Recognize a line of symmetry in a figure.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.OA.A.1 Use parentheses or brackets in numerical expressions, and evaluate expressions with these symbols.	**LC.5.OA.A.1** Evaluate an expression with one set of parentheses.
5.OA.A.2 Write simple expressions that record calculations with whole numbers, fractions, and decimals, and interpret numerical expressions without evaluating them. *For example, express the calculation "add 8 and 7, then multiply by 2" as* $2 \times (8 + 7)$*. Recognize that 3 x (18,932 + 9.21) is three times as large as 18,932 + 9.21, without having to calculate the indicated sum or product.*	**LC.5.OA.A.2** Write a simple numerical expression that indicates calculations with whole numbers.
5.OA.B.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*	**LC.5.OA.B.3a** Given 2 patterns involving the same context (e.g., collecting marbles) determine the 1st 5 terms and compare the values. **LC.5.OA.B.3b** When given a line graph representing two arithmetic patterns, identify the relationship between the two. **LC.5.OA.B.3c** Generate or select a comparison between two graphs from a similar situation. **LC.5.OA.B.3d** Using provided table with numerical patterns, form ordered pairs.
5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.	**LC.5.NBT.A.1** Compare the value of a number when it is represented in different place values of two 3 digit numbers.
5.NBT.A.2 Explain and apply patterns in the number of zeros of the product when multiplying a number by powers of 10. Explain and apply patterns in the values of the digits in the product or the quotient, when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. *For example,* $10^0 = 1$*,* $10^1 = 10$ *... and* $2.1 \times 10^2 = 210$*.*	**LC.5.NBT.A.2** Find the product of a number and a power of 10.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.NBT.A.3 Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$. b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	**LC.5.NBT.A.3a** Read, write, or select a decimal to the hundredths place. **LC.5.NBT.A.3b** Read, write or select a decimal to the thousandths place. **LC.5.NBT.A.3c** Compare two decimals to the thousandths place with a value of less than 1.
5.NBT.A.4 Use place value understanding to round decimals to any place.	**LC.5.NBT.A.4a** Round decimals to the next whole number. **LC.5.NBT.A.4b** Round decimals to the tenths place. **LC.5.NBT.A.4c** Round decimals to the hundredths place.
5.NBT.B.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	**LC.5.NBT.B.5** Multiply whole numbers with up to 3-digits by numbers with up to 2-digits.
5.NBT.B.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, subtracting multiples of the divisor, and/or the relationship between multiplication and division. Illustrate and/or explain the calculation by using equations, rectangular arrays, area models, or other strategies based on place value.	**LC.5.NBT.B.6a** Find whole number quotients up to two dividends and two divisors. **LC.5.NBT.B.6b** Find whole number quotients up to four dividends and two divisors.
5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; justify the reasoning used with a written explanation.	**LC.5.NBT.B.7** Solve 1 step problems using decimals.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.NF.A.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example,* $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. *(In general,* $a/b + c/d = (ad + bc)/bd$.*)*	**LC.5.NF.A.1a** Add and subtract fractions with unlike denominators by replacing fractions with equivalent fractions (identical denominators). **LC.5.NF.A.1b** Add or subtract fractions with unlike denominators.
5.NF.A.2 Solve word problems involving addition and subtraction of fractions. a. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. b. Use benchmark fractions and number sense of fractions to estimate mentally and justify the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.* c.	**LC.5.NF.A.2** Solve one-step word problems involving addition and subtraction of fractions with unlike denominators.
5.NF.B.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret* $3/4$ *as the result of dividing 3 by 4, noting that* $3/4$ *multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size* $3/4$*. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*	**LC.5.NF.B.3** Solve a one-step word problem involving division of whole numbers leading to answers in the form of a fraction or mixed number.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product (m/n) x q as m parts of a partition of q into n equal parts; equivalently, as the result of a sequence of operations, m x $q \div n$. *For example, use a visual fraction model to show understanding, and create a story context for (m/n) x q.* b. Construct a model to develop understanding of the concept of multiplying two fractions and create a story context for the equation. [In general, (m/n) x (c/d) = (mc)/(nd).] c. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. d. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	**LC.5.NF.B.4** Multiply a fraction by a whole or mixed number.
5.NF.B.5 Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case). c. Explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number. d. Relating the principle of fraction equivalence a/b = (n x a)/(n x b) to the effect of multiplying a/b by 1.	**LC.5.NF.B.5** Determine whether the product will increase or decrease based on the multiplier.
5.NF.B.6 Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	**LC.5.NF.B.6** Solve word problems involving multiplication of fractions and mixed numbers.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.NF.B.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.* b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.* c. Solve real-world *problems* involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?*	**LC.5.NF.B.7** Divide unit fractions by whole numbers and whole numbers by unit fractions.
5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multi-step, real-world problems (e.g., convert 5 cm to 0.05 m; 9 ft to 108 in).	**LC.5.MD.A.1a** Convert measurements of time. **LC.5.MD.A.1b** Convert standard measurements of length. **LC.5.MD.A.1c** Convert standard measurements of mass. **LC.5.MD.A.1d** Solve problems involving conversions of standard measurement units when finding area, volume, time lapse, or mass.
5.MD.B.2 Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*	**LC.5.MD.B.2** Given a data set of fractions with denominators 2, 4, or 8, create a line plot and use the information on the plot to solve problems.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume. b. A solid figure that can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units.	**LC.5.MD.C.3** Select a cube as the measurement unit for the volume.
5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	**LC.5.MD.C.4** Use cubes (blocks or other manipulatives) to create a solid figure and counts the number of cubes to determine its volume.
5.MD.C.5 Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems. **c.** Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems.	**LC.5.MD.C.5a** Use filling and multiplication to determine volume. **LC.5.MD.C.5b** Apply formula to solve one step problems involving volume. **LC.5.MD.C.5c** Decompose complex 3-D shapes into simple 3-D shapes to measure volume.

Grade 5 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5.G.A.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number in the ordered pair indicates how far to travel from the origin in the direction of one axis, and the second number in the ordered pair indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).	**LC.5.G.A.1a** Locate the x and y axis on a graph. **LC.5.G.A.1b** Locate points on a graph. **LC.5.G.A.1c** Use order pairs to graph given points.
5.G.A.2 Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	**LC.5.G.A.2** Find coordinate values of points in the context of a situation**.**
5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*	**LC.5.G.B.3** Recognize properties of simple plane figures.
5.G.B.4 Classify quadrilaterals in a hierarchy based on properties. (Students will define a trapezoid as a quadrilateral with at least one pair of parallel sides.)	**LC.5.G.B.4** Distinguish quadrilaterals by their properties.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."*	**LC.6.RP.A.1a** Write or select a ratio to match a given statement and representation. **LC.6.RP.A.1b** Select or make a statement to interpret a given ratio. **LC.6.RP.A.1c** Describe the ratio relationship between two quantities for a given situation. **LC.6.RP.A.1d** Complete a statement that describes the ratio relationship between two quantities. **LC.6.RP.A.1e** Write or select a ratio to match a given statement and representation.
6.RP.A.2 Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. *For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."*	**LC.6.RP.A.2** Determine the unit rate in a variety of contextual situations.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.RP.A.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. b. Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what unit rate were lawns being mowed?* c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole, given a part and the percent. d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	**LC.6.RP.A.3a** Use ratios and reasoning to solve real-world mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations). **LC.6.RP.A.3b** Find a missing value (representations, whole numbers, common fractions, decimals to hundredths place, percent) for a given ratio. **LC.6.RP.A.3c** Solve unit rate problems involving unit pricing. **LC.6.RP.A.3d** Solve one step real world measurement problems involving unit rates with ratios of whole numbers when given the unit rate (3 inches of snow falls per hour, how much in 6 hours). **LC.6.RP.A.3e** Calculate a percent of a quantity as rate per 100. **LC.6.RP.A.3f** Complete a conversion table for length, mass, time, volume. **LC.6.RP.A.3g** Analyze a table of equivalent ratios to answer questions. **LC.6.RP.A.3h** Solve word problems involving ratios.
6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, create a story context for* $(2/3) \div (3/4)$ *and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that* $(2/3) \div (3/4) = 8/9$ *because* $3/4$ *of* $8/9$ *is* $2/3$. *(In general,* $(a/b) \div (c/d) = ad/bc$.*) How much chocolate will each person get if 3 people share* $1/2$ *lb of chocolate equally? How many* $3/4$*-cup servings are in* $2/3$ *of a cup of yogurt? How wide is a rectangular strip of land with length* $3/4$ *mi and area* $1/2$ *square mi?*	**LC.6.NS.A.1** Solve one step problems involving division of fractions by fractions.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.	**LC.6.NS.B.2** Divide multi-digit whole numbers.
6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	**LC.6.NS.B.3** Solve one step, addition, subtraction, multiplication, or division problems with fractions or decimals.
6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. *For example, express 36 + 8 as 4 (9 + 2).*	**LC.6.NS.B.4** Find the greatest common multiple of two whole numbers less than or equal 25 and the least common multiple of two whole numbers less than or equal to 8.
6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	**LC.6.NS.C.5** Select the appropriate meaning of a negative number in a real world situation.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., –(–3) = 3, and that 0 is its own opposite. b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	**LC.6.NS.C.6a** Find given points between -10 and 10 on both axes of a coordinate plane. **LC.6.NS.C.6b** Label points between -10 and 10 on both axes of a coordinate plane. **LC.6.NS.C.6c** Identify numbers as positive or negative. **LC.6.NS.C.6d** Locate positive and negative numbers on a number line. **LC.6.NS.C.6e** Plot positive and negative numbers on a number line.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.NS.C.7 Understand ordering and absolute value of rational numbers. a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. *For example, interpret –3 > –7 as a statement that –3 is located to the right of –7 on a number line oriented from left to right.* b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, write –3 °C > –7 °C to express the fact that –3 °C is warmer than –7 °C.* c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. *For example, for an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt in dollars.* d. Distinguish comparisons of absolute value from statements about order. *For example, recognize that an account balance less than –30 dollars represents a debt greater than 30 dollars.*	**LC.6.NS.C.7a** Compare two numbers on a number line (e.g., -2 > -9). **LC.6.NS.C.7b** Determine the meaning of absolute value.
6.NS.C.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	**LC.6.NS.C.8** Use coordinates and absolute value to find the distance between two coordinates with the same first coordinate or the same second coordinate.
6.EE.A.1 Write and evaluate numerical expressions involving whole-number exponents.	**LC.6.EE.A.1a** Identify what an exponent represents (e.g., $8^3 = 8 \times 8 \times 8$). **LC.6.EE.A.1b** Solve numerical expressions involving whole number exponents.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.EE.A.2 Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as 5 – y.* b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.* c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6 s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.*	**LC.6.EE.A.2** Evaluate expressions from formulas containing exponents for specific values of their variables.
6.EE.A.3 Apply the properties of operations to generate equivalent expressions. *For example, apply the distributive property to the expression 3(2 + x) to produce the equivalent expression 6 + 3x; apply the distributive property to the expression 24x + 18y to produce the equivalent expression 6 (4x + 3y); apply properties of operations to y + y + y to produce the equivalent expression 3y.*	**LC.6.EE.A.3** Use properties to produce equivalent expressions.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.EE.A.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). *For example, the expressions y + y + y and 3y are equivalent because they name the same number regardless of which number y stands for.*	**LC.6.EE.A.4** Evaluate whether or not both sides of an equation are equal.
6.EE.B.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	**LC.6.EE.B.5** Use substitute to determine which values from a specified set make an equation or inequality true.
6.EE.B.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	**LC.6.EE.B.6** Use variable to represent numbers and write expressions when solving real world problems.
6.EE.B.7 Solve real-world and mathematical problems by writing and solving equations and inequalities of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers. Inequalities will include <, >, ≤, and ≥.	**LC.6.EE.B.7a** Solve problems or word problems using up to three digit numbers and any of the four operations. **LC.6.EE.B.7b** Solve real world, single step linear equations.
6.EE.B.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	**LC.6.EE.B.8** Given a real world problem, write an inequality.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.*	**LC.6.EE.C.9a** Use variables to represent two quantities in a real-world problem that change in relationship to one another. **LC.6.EE.C.9b** Analyze the relationships between the dependent and independent variables using graphs and tables, and relate to the equation.
6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	**LC.6.G.A.1a** Apply the formula to find the area of triangles. **LC.6.G.A.1b** Decompose complex shapes (polygon, trapezoid, pentagon) into simple shapes (rectangles, squares, triangles) to measure area. **LC.6.G.A.1c** Find area of quadrilaterals. **LC.6.G.A.1d** Find area of triangles
6.G.A.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	**LC.6.G.A.2** Identify the appropriate formula (i.e., perimeter, area, volume) to use when measuring for different purposes in a real life context.
6.G.A.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	**LC.6.G.A.3a** Use coordinate points to draw polygons. **LC.6.G.A.3b** Use coordinate points to find the side lengths of polygons that are horizontal or vertical.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**LC.6.G.A.4** Find the surface area of three dimensional figures using nets of rectangles or triangles.
6.SP.A.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.*	**LC.6.SP.A.1** Identify statistical questions and make a plan for data collection.
6.SP.A.2 Understand that a set of data collected to answer a statistical question has a distribution that can be described by its center, spread, and overall shape.	**LC.6.SP.A.2a** Find the range of a given data set. **LC.6.SP.A.2b** Explain or identify what the mode represents in a set of data.
6.SP.A.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	**LC.6.SP.A.3** Explain or identify what the mean represents in a set of data.
6.SP.B.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	**LC.6.SP.B.4** Collect and graph data: bar graph, line plots, dot plots, histograms.

Grade 6 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6.SP.B.5 Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	**LC.6.SP.B.5a** Select an appropriate statement about the range of the data for a given graph (bar graph, line plot) (i.e., range of data) up to 10 points. **LC.6.SP.B.5b** Use measures of central tendency to interpret data including overall patterns in the data. **LC.6.SP.B.5c** Solve for mean of a given data set. **LC.6.SP.B.5d** Select statement that matches mean, mode, and spread of data for 1 measure of central tendency for a given data set. **LC.6.SP.B.5e** Explain or identify what the median represents in a set of data. **LC.6.SP.B.5f** Use measures of central tendency to interpret data including overall patterns in the data**.** **LC.6.SP.B.5g** Solve for the median of a given data set. **LC.6.SP.B.5h** Identify outliers, range, mean, median, and mode.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.RP.A.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. *For example, if a person walks ½ mile in each ¼ hour, compute the unit rate as the complex fraction ½/¼ miles per hour, equivalently 2 miles per hour.*	**LC.7.RP.A.1a** Find unit rates given a ratio. **LC.7.RP.A.1b** Determine unit rates associated with ratios of lengths, areas, and other quantities measured in like units. **LC.7.RP.A.1c** Solve one step problems involving unit rates associated with ratios of fractions.
7.RP.A.2 Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. *c.* Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.* d. Explain what a point (*x*, *y*) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, *r*) where *r* is the unit rate.	**LC.7.RP.A.2a** Identify the proportional relationship between two quantities. **LC.7.RP.A.2b** Determine if two quantities are in a proportional relationship using a table of equivalent ratios or points graphed on a coordinate plane. **LC.7.RP.A.2c** Use a rate of change or proportional relationship to determine the points on a coordinate plane. **LC.7.RP.A.2d** Represent proportional relationships on a line graph.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.RP.A.3 Use proportional relationships to solve multi-step ratio and percent problems of simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error.	**LC.7.RP.A.3a** Find percents in real world contexts. **LC.7.RP.A.3b** Solve one step percentage increase and decrease problems. **LC.7.RP.A.3c** Use proportions to solve ratio problems. **LC.7.RP.A.3d** Solve word problems involving ratios. **LC.7.RP.A.3e** Use proportional relationships to solve multistep percent problems.
7.NS.A.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.* b. Understand $p + q$ as the number located a distance $\|q\|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. c. Understand subtraction of rational numbers as adding the additive inverse, $p – q = p + (–q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. d. Apply properties of operations as strategies to add and subtract rational numbers.	**LC.7.NS.A.1a** Identify the additive inverse of a number (e.g., -3 and +3). **LC.7.NS.A.1b** Identify the difference between two given numbers on a number line using absolute value. **LC.7.NS.A.1c** Identify a representation of addition on a horizontal or vertical number line. **LC.7.NS.A.1d** Solve problems requiring addition or subtraction of positive/negative numbers.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.NS.A.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (–1)(–1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. c. Apply properties of operations as strategies to multiply and divide rational numbers. d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	**LC.7.NS.A.2a** Solve multiplication problems with positive/negative numbers. **LC.7.NS.A.2b** Solve division problems with positive/negative numbers.
7.NS.A.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	**LC.7.NS.A.3a** Solve one step addition, subtraction, multiplication, division problems with fractions, decimals, and positive/negative numbers. **LC.7.NS.A.3b** Solve two step addition, subtraction, multiplication, and division problems with fractions, decimals, or positive/negative numbers.
7.EE.A.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients to include multiple grouping symbols (e.g., parentheses, brackets, and braces).	**LC.7.EE.A.1a** Add and subtract linear expressions. **LC.7.EE.A.1b** Factor and expand linear expressions.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.EE.A.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, a + 0.05a = 1.05a means that "increase by 5%" is the same as "multiply by 1.05."*	No Louisiana Connectors written for this standard.
7.EE.B.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional $1/10$ of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 $3/4$ inches long in the center of a door that is 27 $1/2$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*	**LC.7.EE.B.3a** Identify an equivalent fraction, decimal and percent when given one of the three numbers. **LC.7.EE.B.3b** Solve real-world multi-step problems using whole numbers.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.EE.B.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?* b. Solve word problems leading to inequalities of the form $px + q > r$, $px + q \geq r$, $px + q < r$, or $px + q \leq r$ where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.*	**LC.7.EE.B.4a** Solve equations with 1 variable based on real-world problems. **LC.7.EE.B.4b** Set up equations with 1 variable based on real-world problems. **LC.7.EE.B.4c** Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. **LC.7.EE.B.4d** Use a calculator to solve word problems leading to inequalities of the form $px + q > r$, $px + q \geq r$, $px + q < r$, or $px + q \leq r$ where p, q, and r are specific rational numbers.
7.G.A.1 Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	**LC.7.G.A.1a** Solve problems that use proportional reasoning with ratios of length and area. **LC.7.G.A.1b** Solve one step real world problems related to scaling.
7.G.A.2 Draw (freehand, with ruler and protractor, or with technology) geometric shapes with given conditions. (Focus is on triangles from three measures of angles or sides, noticing when the conditions determine one and only one triangle, more than one triangle, or no triangle.)	**LC.7.G.A.2** Construct or draw plane figures using properties.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.G.A.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	**LC.7.G.A.3** Describe the two-dimensional figures that result from a decomposed three-dimensional figure.
7.G.B.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	**LC.7.G.B.4** Apply formula to measure area and circumference of circles.
7.G.B.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	**LC.7.G.B.5a** Identify supplementary angles. **LC.7.G.B.5b** Identify complimentary angles. **LC.7.G.B.5c** Identify adjacent angles. **LC.7.G.B.5d** Use angle relationships to find the value of a missing angle.
7.G.B.6 Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. (Pyramids limited to surface area only.)	**LC.7.G.B.6a** Add the area of each face of a prism to find surface area of three dimensional objects. **LC.7.G.B.6b** Find the surface area of three-dimensional figures using nets of rectangles or triangles. **LC.7.G.B.6c** Find area of plane figures and surface area of solid figures (quadrilaterals). **LC.7.G.B.6d** Solve one step real world measurement problems involving area, volume, or surface area of two and three-dimensional objects.
7.SP.A.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	**LC.7.SP.A.1** Determine sample size to answer a given question.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.SP.A.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*	**LC.7.SP.A.2** Analyze graphs to determine or select appropriate comparative inferences about two samples or populations.
7.SP.B.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities using quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	**LC.7.SP.B.3** Make or select a statement to compare the distribution of 2 data sets.
7.SP.B.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example,* decide *whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*	**LC.7.SP.B.4a** Identify the range (high/low), median(middle), mean, or mode of a given data set. **LC.7.SP.B.4b** Analyze graphs to determine or select appropriate comparative inferences about two samples or populations. **LC.7.SP.B.4c** Make or select an appropriate statements based upon two unequal data sets using measure of central tendency and shape.
7.SP.C.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around ½ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	**LC.7.SP.C.5a** Describe the probability of events as being certain or impossible, likely, less likely or equally likely. **LC.7.SP.C.5b** State the theoretical probability of events occurring in terms of ratios (words, percentages, decimals).

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.SP.C.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*	**LC.7.SP.C.6** Make a prediction regarding the probability of an event occurring; conduct simple probability experiments.
7.SP.C.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.* b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*	**LC.7.SP.C.7** Compare actual results of simple experiment with theoretical probabilities.

Grade 7 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7.SP.C.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space that compose the event. c. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?*	**LC.7.SP.C.8a** Determine the theoretical probability of multistage probability experiments (2 coins, 2 dice). **LC.7.SP.C.8b** Collect data from multistage probability experiments (2 coins, 2 dice). **LC.7.SP.C.8c** Compare actual results of multistage experiment with theoretical probabilities.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.NS.A.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers, show that the decimal expansion repeats eventually.~~,~~ Convert a decimal expansion that repeats eventually into a rational number by analyzing repeating patterns.	**LC.8.NS.A.1a** Identify π as an irrational number. **LC.8.NS.A.1b** Round irrational numbers to the hundredths place.
8.NS.A.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). *For example, by truncating the decimal expansion of √2, show that √2 is between 1and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations to the hundredths place.*	**LC.8.NS.A.2** Use approximations of irrational numbers to locate them on a number line.
8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. *For example,* $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.	**LC.8.EE.A.1** Use properties of integer exponents to produce equivalent expressions.
8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that √2 is irrational.	**LC.8.EE.A.2** Find the square roots of perfect squares and cube roots of whole numbers less than 100.
8.EE.A.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. *For example, estimate the population of the United States as* 3×10^8 *and the population of the world as* 7×10^9*, and determine that the world population is more than 20 times larger.*	**LC.8.EE.A.3** Rewrite very large or very small quantities as a single digit times an integer power of 10.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.EE.A.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.	**LC.8.EE.A.4a** Convert a number expressed in scientific notation as number in standard form for numbers no greater than 10,000. **LC.8.EE.A.4b** Perform operations with numbers expressed in scientific notation.
8.EE.B.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*	**LC.8.EE.B.5** Represent proportional relationships on a line graph.
8.EE.B.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.	**LC.8.EE.B.6a** Write the equation of a line passing through the origin as $y = mx$. **LC.8.EE.B.6b** Write the equation of a line intercepting the y-axis at b as $y = mx + b$.
8.EE.C.7 Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	**LC.8.EE.C.7** Solve linear equations with 1 variable.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.EE.C.8 Analyze and solve pairs of simultaneous linear equations. a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.* c. Solve real-world and mathematical problems leading to two linear equations in two variables. *For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.*	**LC.8.EE.C.8a** Solve systems of two linear equations in two variables and graph the results. **LC.8.EE.C.8b** Solve real world and mathematical problems leading to two linear equations in two variables.
8.F.A.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (Function notation is not required in this grade level.)	**LC.8.F.A.1** Distinguish between functions and non-functions, using equations, graphs, or tables.
8.F.A.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*	**LC.8.F.A.2** Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.F.A.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; categorize functions as linear or nonlinear when given equations, graphs, or tables. *For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.*	**LC.8.F.A.3** Given two graphs, describe the function as linear and not linear.
8.F.B.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	**LC.8.F.B.4** Identify the rate of change (slope) and initial value (y-intercept) from graphs.
8.F.B.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	**LC.8.F.B.5a** Given a verbal description of a situation, create or identify a graph to model the situation. **LC.8.F.B.5b** Given a graph of a situation, generate a description of the situation. **LC.8.F.B.5c** Describe or select the relationship between the two quantities Given a line graph of a situation.
8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations: a. Lines are taken to lines, and line segments to line segments of the same length. b. Angles are taken to angles of the same measure. c. Parallel lines are taken to parallel lines.	**LC.8.G.A.1a** Recognize a rotation, reflection, or translation of a figure. **LC.8.G.A.1b** Recognize that lengths of line segments and measures of angles do not change when rotated, reflected or translated. **LC.8.G.A.1c** Recognize that lines are taken to lines and parallel lines are taken to parallel lines when rotated, reflected or translated.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.G.A.2 Explain that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. (Rotations are only about the origin and reflections are only over the *y*-axis and *x*-axis in Grade 8.)	**LC.8.G.A.2** Recognize congruent and similar figures.
8.G.A.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. (Rotations are only about the origin, dilations only use the origin as the center of dilation, and reflections are only over the *y*-axis and *x*-axis in Grade 8.)	**LC.8.G.A.3** Identify a rotation, reflection, or translation of a plane figure when given coordinates.
8.G.A.4 Explain that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. (Rotations are only about the origin, dilations only use the origin as the center of dilation, and reflections are only over the *y*-axis and *x*-axis in Grade 8.)	**LC.8.G.A.4a** Recognize congruent and similar figures. **LC.8.G.A.4b** Given two similar two-dimensional figures, show or describe a sequence that exhibits the similarity between them.
8.G.A.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.*	**LC.8.G.A.5** Use angle relationships to find the value of a missing angle.
8.G.B.6 Explain a proof of the Pythagorean Theorem and its converse using the area of squares.	**LC.8.G.B.6** Create a model of the Pythagorean Theorem using areas of squares with a right triangle whose side lengths are 3, 4 and 5 units.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.G.B.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	**LC.8.G.B.7a** Apply the Pythagorean theorem to determine lengths/distances in real-world situations. **LC.8.G.B.7b** Find the hypotenuse of a two-dimensional right triangle (Pythagorean Theorem). **LC.8.G.B.7c** Find the missing side lengths of a two-dimensional right triangle (Pythagorean Theorem).
8.G.B.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	**LC.8.G.B.8** Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.
8.G.C.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	**LC.8.G.C.9** Apply the formula to find the volume of 3-dimensional shapes (i.e., cubes, spheres, and cylinders).
8.SP.A.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	**LC.8.SP.A.1a** Graph bivariate data using scatter plots and identify possible associations between the variables. **LC.8.SP.A.1b** Using box plots and scatter plots, identify data points that appear to be outliers. **LC.8.SP.A.1c** Analyze displays of bivariate data to develop or select appropriate claims about those data.
8.SP.A.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	**LC.8.SP.A.2** Distinguish between a linear and non-linear association when analyzing bivariate data on a scatter plot.

Grade 8 Math	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8.SP.A.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height*.	**LC.8.SP.A.3** Interpret the slope and the y-intercept of a line in the context of a problem.
8.SP.A.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*	**LC.8.SP.A.4** Construct a two-way table summarizing data on two categorical variables collected from the same subjects; identify possible association between the two variables.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: N-RN.B.3 Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.	**LC.A1: N-RN.B.3** Explain the pattern for the sum or product for combinations of rational and irrational numbers.
A1: N-Q.A.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	**LC.A1: N-Q.A.1a** Determine the necessary unit(s) to use to solve real-world problems. **LC.A1: N-Q.A.1b** Solve real-world problems involving units of measurement
A1: N-Q.A.2 Define appropriate quantities for the purpose of descriptive modeling.	No Louisiana Connectors written for this standard.
A1: N-Q.A.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	No Louisiana Connectors written for this standard.
A1: A-SSE.A.1 Interpret expressions that represent a quantity in terms of its context. a. Interpret parts of an expression, such as terms, factors, and coefficients. b. Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P.*	No Louisiana Connectors written for this standard.
A1: A-SSE.A.2 Use the structure of an expression to identify ways to rewrite it. *For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$, or see $2x^2 + 8x$ as $(2x)(x) + 2x(4)$, thus recognizing it as a polynomial whose terms are products of monomials and the polynomial can be factored as $2x(x+4)$.*	No Louisiana Connectors written for this standard.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: A-SSE.B.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. a. Factor a quadratic expression to reveal the zeros of the function it defines. b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. c. Use the properties of exponents to transform expressions for exponential functions emphasizing integer exponents. For example, *the growth of bacteria can be modeled by either* $f(t) = 3^{(t+2)}$ *or* $g(t) = 9(3^t)$ *because the expression* $3^{(t+2)}$ *can be rewritten as* $(3^t)(3^2) = 9(3^t)$.	**LC.A1: A-SSE.B.3** Factor a quadratic expression.
A1: A-APR.A.1 Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	**LC.A1: A-APR.A.1a** Understand the definition of a polynomial. **LC.A1: A-APR.A.1b** Understand the concepts of combining like terms and closure. **LC.A1: A-APR.A.1c** Add, subtract, and multiply polynomials and understand how closure applies under these operations.
A1: A-APR.B.3 Identify zeros of quadratic functions, and use the zeros to sketch a graph of the function defined by the polynomial.	**LC.A1: A-APR.B.3** Find the zeros of a polynomial when the polynomial is factored.
A1: A-CED.A.1 Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear, quadratic, and exponential functions.*	**LC.A1: A-CED.A.1** Translate a real-world problem into a one variable linear equation.
A1: A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	No Louisiana Connectors written for this standard.
A1: A-CED.A.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.*	No Louisiana Connectors written for this standard.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's law V = IR to highlight resistance R.*	**LC.A1: A-CED.A.4** Solve multi-variable formulas or literal equations, for a specific variable.
A1: A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.	No Louisiana Connectors written for this standard.
A1: A-REI.B.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	No Louisiana Connectors written for this standard.
A1: A-REI.B.4 Solve quadratic equations in one variable. a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula, and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as "no real solution."	**LC.A1: A-REI.B.4a** Transform a quadratic equation written in standard form to an equation in vertex form $(x - p) = q^2$ by completing the square. **LC.A1: A-REI.B.4b** Derive the quadratic formula by completing the square on the standard form of a quadratic equation. **LC.A1: A-REI.B.4c** Solve quadratic equations in one variable by simple inspection, taking the square root, factoring, and completing the square.
A1: A-REI.C.5 Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.	**LC.A1: A-REI.C.5** Solve systems of equations using the elimination method (sometimes called linear combinations).

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: A-REI.C.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	**LC.A1: A-REI.C.6a** Solve a system of equations by substitution (solving for one variable in the first equation and substitution it into the second equation). **LC.A1: A-REI.C.6b** Solve systems of equations using graphs.
A1: A-REI.D.10 Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).	**LC.A1: A-REI.D.10** Understand that all solutions to an equation in two variables are contained on the graph of that equation.
A1: A-REI.D.11 Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, piecewise linear (to include absolute value), and exponential functions.	**LC.A1: A-REI.D.11** Explain why the intersection of $y = f(x)$ and $y = g(x)$ is the solution of the equation $f(x) = g(x)$ for any combination of linear or exponential. Find the solution(s) by: Using technology to graph the equations and determine their point of intersection, Using tables of values, or Using successive approximations that become closer and closer to the actual value.
A1: A-REI.D.12 Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.	**LC.A1: A-REI.D.12a** Graph the solutions to a linear inequality in two variables as a half-plane, excluding the boundary for non-inclusive inequalities. **LC.A1: A-REI.D.12b** Graph the solution set to a system of linear inequalities in two variables as the intersection of their corresponding half-planes.
A1: F-IF.A.1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.	No Louisiana Connectors written for this standard.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: F-IF.A.2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	No Louisiana Connectors written for this standard.
A1: F-IF.A.3 Recognize that sequences are functions whose domain is a subset of the integers. Relate arithmetic sequences to linear functions and geometric sequences to exponential functions.	No Louisiana Connectors written for this standard.
A1: F-IF.B.4 For ~~a~~ linear, piecewise linear (to include absolute value), quadratic, and exponential functions that model~~s~~ a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; and end behavior.*	No Louisiana Connectors written for this standard.
A1: F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.*	No Louisiana Connectors written for this standard.
A1: F-IF.B.6 Calculate and interpret the average rate of change of a linear, quadratic, piecewise linear (to include absolute value), and exponential function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.	No Louisiana Connectors written for this standard.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima.	No Louisiana Connectors written for this standard.
A1: F-IF.C.8a Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.	No Louisiana Connectors written for this standard.
A1: F-IF.C.9 Compare properties of two functions (linear, quadratic, piecewise linear [to include absolute value] or exponential) each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, determine which has the larger maximum.*	No Louisiana Connectors written for this standard.
A1: F-BF.A.1a Write a linear, quadratic, or exponential function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context.	No Louisiana Connectors written for this standard.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: F-BF.B.3 Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $kf(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative). Without technology, find the value of k given the graphs of linear and quadratic functions. With technology, experiment with cases and illustrate an explanation of the effects on the graph that include cases where $f(x)$ is a linear, quadratic, piecewise linear (to include absolute value) or exponential function.	No Louisiana Connectors written for this standard.
A1: F-LE.A.1 Distinguish between situations that can be modeled with linear functions and with exponential functions. a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	No Louisiana Connectors written for this standard.
A1: F-LE.A.2 Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).	No Louisiana Connectors written for this standard.
A1: F-LE.A.3 Observe, using graphs and tables, that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.	No Louisiana Connectors written for this standard.
A1: F-LE.B.5 Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.	No Louisiana Connectors written for this standard.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: S-ID.A.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.	**LC.A1: S-ID.A.2a** Use descriptive stats; range, median, mode, mean, outliers/gaps to describe the data set. **LC.A1: S-ID.A.2b** Compare means, median, and range of 2 sets of data.
A1: S-ID.A.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	No Louisiana Connectors written for this standard.
A1: S-ID.B.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.	No Louisiana Connectors written for this standard.
A1: S-ID.B.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize linear and quadratic models.* b. Informally assess the fit of a function by plotting and analyzing residuals. c. Fit a linear function for a scatter plot that suggests a linear association.	**LC.A1: S-ID.B.6a** Represent data on a scatter plot to describe and predict. **LC.A1: S-ID.B.6b** Select an appropriate statement that describes the relationship between variables.
A1: S-ID.C.7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	**LC.A1: S-ID.C.7** Interpret the rate of change using graphical representations.

Algebra I	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A1: S-ID.C.8 Compute (using technology) and interpret the correlation coefficient of a linear fit.	No Louisiana Connectors written for this standard.
A1: S-ID.C.9 Distinguish between correlation and causation.	No Louisiana Connectors written for this standard.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: N-RN.A.1 Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. *For example, we define 51/3 to be the cube root of 5 because we want (51/3)3 = 5(1/3)3 to hold, so (51/3)3 must equal 5.*	No Louisiana Connectors written for this standard.
A2: N-RN.A.2 Rewrite expressions involving radicals and rational exponents using the properties of exponents.	**LC.A2: N-RN.A.2** Rewrite expressions that include rational exponents.
A2: N-Q.A.2 Define appropriate quantities for the purpose of descriptive modeling.	No Louisiana Connectors written for this standard.
A2: N-CN.A.1 Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.	No Louisiana Connectors written for this standard.
A2: N-CN.A.2 Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	No Louisiana Connectors written for this standard.
A2: N-CN.C.7 Solve quadratic equations with real coefficients that have complex solutions.	No Louisiana Connectors written for this standard.
A2: A-SSE.A.2 Use the structure of an expression to identify ways to rewrite it. *For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.*	No Louisiana Connectors written for this standard.
A2: A-SSE.B.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. c. Use the properties of exponents to transform expressions for exponential functions emphasizing integer exponents. *For example the expression 1.15^t can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.*	**LC.A2: A-SSE.B.3** Represent quantities and expressions that use exponents.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: A-SSE.B.4 Apply the formula for the sum of a finite geometric series (when the common ratio is not 1) to solve problems. *For example, calculate mortgage payments.*	**LC.A2: A-SSE.B.4** Use the formula to solve real world problems such as calculating the height of a tree after n years given the initial height of the tree and the rate the tree grows each year.
A2: A-APR.A.2 Know and apply the Remainder Theorem: For a polynomial $p(x)$ and a number a, the remainder on division by $x – a$ is $p(a)$, so $p(a) = 0$ if and only if $(x – a)$ is a factor of $p(x)$.	**LC.A2: A-APR.A.2** Understand and apply the Remainder Theorem.
A2: A-APR.B.3 Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.	**LC.A2: A-APR.B.3** Find the zeros of a polynomial when the polynomial is factored.
A2: A-APR.C.4 Use polynomial identities to describe numerical relationships. *For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 – y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples.*	**LC.A2: A-APR.C.4a** Prove polynomial identities by showing steps and providing reasons. **LC.A2: A-APR.C.4b** Illustrate how polynomial identities are used to determine numerical relationships. *For example the polynomial identity $(a + b)^2 = a^2 + 2ab + b^2$ can be used to rewrite $(25)^2 = (20 + 5)^2 = 20^2 + 2(20*5) + 5^2$.*
A2: A-APR.D.6 Rewrite simple rational expressions in different forms; write $a(x)/b(x)$ in the form $q(x) + r(x)/b(x)$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system.	**LC.A2: A-APR.D.6** Rewrite rational expressions, a(x)/b(x), in the form q(x) + r(x)/b(x) by using factoring, long division, or synthetic division.
A2: A-CED.A.1 Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*	**LC.A2: A-CED.A.1** Translate a real-world problem into a one variable linear equation.
A2: A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.	No Louisiana Connectors written for this standard.
A2: A-REI.A.2 Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.	No Louisiana Connectors written for this standard.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: A-REI.B.4 Solve quadratic equations in one variable. b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula, and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.	**LC.A2: A-REI.B.4** Solve quadratic equations in one variable by simple inspection, taking the square root, factoring, and completing the square.
A2: A-REI.C.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), limited to systems of at most three equations and three variables. With graphic solutions, systems are limited to two variables.	**LC.A2: A-REI.C.6a** Solve systems of equations using the elimination method (sometimes called linear combinations). **LC.A2: A-REI.C.6b** Solve a system of equations by substitution (solving for one variable in the first equation and substitution it into the second equation). **LC.A2: A-REI.C.6c** Solve systems of equations using graphs.
A2: A-REI.C.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. *For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.*	**LC.A2: A-REI.C.7** Solve a system containing a linear equation and a quadratic equation in two variables graphically and symbolically.
A2: A-REI.D.11 Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.	**LC.A2: A-REI.D.11** Explain why the intersection of $y = f(x)$ and $y = g(x)$ is the solution of the equation $f(x) = g(x)$ for any combination of linear or exponential. Find the solution(s) by: Using technology to graph the equations and determine their point of intersection, Using tables of values, or Using successive approximations that become closer and closer to the actual value.
A2: F-IF.B.4 For a function that models ~~s~~ a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship*. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*	No Louisiana Connectors written for this standard.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.	No Louisiana Connectors written for this standard.
A2: F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.	No Louisiana Connectors written for this standard.
A2: F-IF.C.8b Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. b. Use the properties of exponents to interpret expressions for exponential functions. *For example, identify percent rate of change in functions such as* $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, *and classify them as representing exponential growth or decay.*	No Louisiana Connectors written for this standard.
A2: F-IF.C.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, determine which has the larger maximum.*	No Louisiana Connectors written for this standard.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: F-BF.A.1 Write a linear, quadratic, or exponential function that describes a relationship between two quantities. b. Determine an explicit expression, a recursive process, or steps for calculation from a context. c. Combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.*	No Louisiana Connectors written for this standard.
A2: F-BF.A.2 Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.	No Louisiana Connectors written for this standard.
A2: F-BF.B.3 Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $kf(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative). Without technology, find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.*	No Louisiana Connectors written for this standard.
A2: F-BF.B.4a Find inverse functions. a. Solve an equation of the form f(x) = c for a simple function f that has an inverse and write an expression for the inverse. *For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$.*	No Louisiana Connectors written for this standard.
A2: F-LE.A.2 Given a graph, a description of a relationship, or two input-output pairs (include reading these from a table), construct linear and exponential functions, including arithmetic and geometric sequences, to solve multi-step problems.	No Louisiana Connectors written for this standard.
A2: F-LE.A.4 For exponential models, express as a logarithm the solution to a $b^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.	No Louisiana Connectors written for this standard.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: F-LE.B.5 Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.	No Louisiana Connectors written for this standard.
A2: F-TF.A.1 Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	No Louisiana Connectors written for this standard.
A2: F-TF.A.2 Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.	No Louisiana Connectors written for this standard.
A2: F-TF.B.5 Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	No Louisiana Connectors written for this standard.
A2: F-TF.C.8 Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to find $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ given $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ and the quadrant.	No Louisiana Connectors written for this standard.
A2: S-ID.A.4 Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.	**LC.A2: S-ID.A.4** Use descriptive stats; range, median, mode, mean, outliers/gaps to describe the data set.
A2: S-ID.B.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. d. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize exponential models.*	**LC.A2: S-ID.B.6a** Represent data on a scatter plot to describe and predict. **LC.A2: S-ID.B.6b** Select an appropriate statement that describes the relationship between variables.
A2: S-IC.A.1 Understand statistics as a process for making inferences about population parameters based on a random sample from that population	**LC.A2: S-IC.A.1** Determine what inferences can be made from statistics.

Algebra II	
Louisiana Student Standards	**Louisiana Connectors (LC)**
A2: S-IC.A.2 Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. *For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?*	No Louisiana Connectors written for this standard.
A2: S-IC.B.3 Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	No Louisiana Connectors written for this standard.
A2: S-IC.B.4 Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.	No Louisiana Connectors written for this standard.
A2: S-IC.B.5 Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	No Louisiana Connectors written for this standard.
A2: S-IC.B.6 Evaluate reports based on data.	**LC.A2: S-IC.B.6a** Make or select an appropriate statement(s) about findings. **LC.A2: S-IC.B.6b** Apply the results of the data to a real world situation.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-CO.A.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	No Louisiana Connectors written for this standard.
GM: G-CO.A.2 Represent transformations in the plane using, e.g., transparencies, tracing paper, or geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).	No Louisiana Connectors written for this standard.
GM: G-CO.A.3 Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.	No Louisiana Connectors written for this standard.
GM: G-CO.A.4 Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.	No Louisiana Connectors written for this standard.
GM: G-CO.A.5 Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.	**LC.GM: G-CO.A.5** Construct, draw or recognize a figure after its rotation, reflection, or translation.
GM: G-CO.B.6 Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.	No Louisiana Connectors written for this standard.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-CO.B.7 Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.	No Louisiana Connectors written for this standard.
GM: G-CO.B.8 Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.	No Louisiana Connectors written for this standard.
GM: G-CO.C.9 Prove and apply theorems about lines and angles. *Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.*	No Louisiana Connectors written for this standard.
GM: G-CO.C.10 Prove and apply theorems about triangles. *Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.*	No Louisiana Connectors written for this standard.
GM: G-CO.C.11 Prove and apply theorems about parallelograms. *Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.*	No Louisiana Connectors written for this standard.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-CO.D.12 Make formal geometric constructions with a variety of tools and methods, e.g., compass and straightedge, string, reflective devices, paper folding, or dynamic geometric software. *Examples: copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.*	**LC.GM: G-CO.D.12** Make formal geometric constructions with a variety of tools and methods.
GM: G-CO.D.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.	No Louisiana Connectors written for this standard.
GM: G-SRT.A.1 Verify experimentally the properties of dilations given by a center and a scale factor: a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.	**LC.GM: G-SRT.A.1** Determine the dimensions of a figure after dilation.
GM: G-SRT.A.2 Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.	**LC.GM: G-SRT.A.2a** Determine if 2 figures are similar. **LC.GM: G-SRT.A.2b** Describe or select why two figures are or are not similar.
GM: G-SRT.A.3 Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.	No Louisiana Connectors written for this standard.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-SRT.B.4 Prove and apply theorems about triangles. *Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity; SAS similarity criteria, SSS similarity criteria, ASA similarity.*	No Louisiana Connectors written for this standard.
GM: G-SRT.B.5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	**LC.GM: G-SRT.B.5a** Use definitions to demonstrate congruency and similarity in figures. **LC.GM: G-SRT.B.5b** Use the reflections, rotations, or translations in the coordinate plane to solve problems with right angles.
GM: G-SRT.C.6 Understand that by similarity, side ratios in right triangles, including special right triangles (30-60-90 and 45-45-90), are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.	No Louisiana Connectors written for this standard.
GM: G-SRT.C.7 Explain and use the relationship between the sine and cosine of complementary angles.	No Louisiana Connectors written for this standard.
GM: G-SRT.C.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.	No Louisiana Connectors written for this standard.
GM: G-C.A.1 Prove that all circles are similar.	No Louisiana Connectors written for this standard.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-C.A.2 Identify and describe relationships among inscribed angles, radii, and chords, including the following: the relationship that exists between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; and a radius of a circle is perpendicular to the tangent where the radius intersects the circle.	No Louisiana Connectors written for this standard.
GM: G-C.A.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.	No Louisiana Connectors written for this standard.
GM: G-C.B.5 Use similarity to determine that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.	**LC.GM: G-C.B.5** Apply the formula to the area of a sector (e.g., area of a slice of pie).
GM: G-GPE.A.1 Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.	No Louisiana Connectors written for this standard.
GM: G-GPE.B.4 Use coordinates to prove simple geometric theorems algebraically. *For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, $\sqrt{3}$) lies on the circle centered at the origin and containing the point (0, 2).*	No Louisiana Connectors written for this standard.
GM: G-GPE.B.5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).	No Louisiana Connectors written for this standard.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-GPE.B.6 Find the point on a directed line segment between two given points that partitions the segment in a given ratio.	No Louisiana Connectors written for this standard.
GM: G-GPE.B.7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.	No Louisiana Connectors written for this standard.
GM: G-GMD.A.1 Give an informal argument, e.g., dissection arguments, Cavalieri's principle, or informal limit arguments, for the formulas for the circumference of a circle; area of a circle; volume of a cylinder, pyramid, and cone.	No Louisiana Connectors written for this standard.
GM: G-GMD.A.3 Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	No Louisiana Connectors written for this standard.
GM: G-GMD.B.4 Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.	No Louisiana Connectors written for this standard.
GM: G-MG.A.1 Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).	No Louisiana Connectors written for this standard.
GM: G-MG.A.2 Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	No Louisiana Connectors written for this standard.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: G-MG.A.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).	**LC.GM: G-MG.A.3** Apply the formula of geometric figures to solve design problems (e.g., designing an object or structure to satisfy physical restraints or minimize cost).
GM: S-CP.A.1 Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").	No Louisiana Connectors written for this standard.
GM: S-CP.A.2 Understand that two events *A* and *B* are independent if the probability of *A* and *B* occurring together is the product of their probabilities, and use this characterization to determine if they are independent.	No Louisiana Connectors written for this standard.
GM: S-CP.A.3 Understand the conditional probability of *A* given *B* as *P*(*A* and *B*)/*P*(*B*), and interpret independence of *A* and *B* as saying that the conditional probability of *A* given *B* is the same as the probability of *A*, and the conditional probability of *B* given *A* is the same as the probability of *B*.	No Louisiana Connectors written for this standard.
GM: S-CP.A.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. *For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.*	**LC.GM: S-CP.A.4** Select or make an appropriate statement based on a two-way frequency table.

Geometry	
Louisiana Student Standards	**Louisiana Connectors (LC)**
GM: S-CP.A.5 Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. *For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.*	**LC.GM: S-CP.A.5** Select or make an appropriate statement based on real world examples of conditional probability.
GM: S-CP.B.6 Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.	No Louisiana Connectors written for this standard.
GM: S-CP.B.7 Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.	No Louisiana Connectors written for this standard.

Kindergarten English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.K.1 With prompting and support, ask and answer questions about key details in a text.	**LC.RL.K.1** With prompting and support, answer questions about key details in a story.
RL.K.2 With prompting and support, retell familiar stories including key details.	**LC.RL.K.2a** With prompting and support, retell a favorite story, including key details. **LC.RL.K.2b** With prompting and support, sequence a set of events in a familiar story. **LC.RL.K.2c** With prompting and support, identify the beginning, middle, and ending of a familiar story. **LC.RL.K.2d** Retell a familiar story (e.g., What was the story about?).
RL.K.3 With prompting and support, identify characters, settings, and major events in a story.	**LC.RL.K.3a** With prompting and support, identify characters in a story. **LC.RL.K.3b** With prompting and support, identify major events (e.g., problem or solution) in a story. **LC.RL.K.3c** With prompting and support, show how characters interacted in a story. **LC.RL.K.3d** With prompting and support, identify a setting in a story.
RL.K.4 Ask and answer questions about unknown words in a text.	**LC.RL.K.4a** Ask questions about unknown words in a text. **LC.RL.K.4b** Answer questions about unknown words in a text.
RL.K.5 Recognize common types of texts (e.g., storybooks, poems).	**LC.RL.K.5a** Answer questions about reading such as "Why do we read? What do we read?" **LC.RL.K.5b** Recognize common types of text.
RL.K.6 With prompting and support, define the role of the author and the illustrator of a story in telling the story.	**LC.RL.K.6a** With prompting and support, identify the author of a familiar story (e.g., Show me the author, Show me who wrote the book). **LC.RL.K.6b** With prompting and support, define the role of the author. **LC.RL.K.6c** With prompting and support, identify the illustrator.

	LC.RL.K.6d With prompting and support, define the role of the illustrator.
RL.K.7 With prompting and support, make connections between the illustrations in the story and the text.	**LC.RL.K.7a** With prompting and support, identify illustrations to aid comprehension. **LC.RL.K.7b** With prompting and support, identify the relationship between an illustration and the story.
RL.K.8 (Not applicable to literature)[2]	
RL.K.9 With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	**LC.RL.K.9** With prompting and support, compare and contrast (i.e., find something the same and something different) between familiar stories.
RL.K.10 Actively engage in group reading activities with purpose and understanding.	**LC.RL.K.10a** Answer questions about reading such as "Why do we read? What do we read?" **LC.RL.K.10b** Choose a literary text or poems to read and reread, listen to, or view for leisure purposes. **LC.RL.K.10c** Engage in group reading of stories or poems by sharing something learned or something enjoyed.
RI.K.1 With prompting and support, ask and answer questions about key details in a text.	**LC.RI.K.1** With prompting and support, answer questions about key details in a text.
RI.K.2 With prompting and support, identify the main topic and retell key details of a text.	**LC.RI.K.2a** Discuss key details and main topic of a preferred text. **LC.RI.K.2b** With prompting and support identify the main topic. **LC.RI.K.2c** With prompting and support, retell/identify key details in a text.
RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	**LC.RI.K.3** With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text**.**

[2] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.	**LC.RI.K.4a** Ask questions about unknown words in a text. **LC.RI.K.4b** Answer questions about unknown words in a text.
RI.K.5 Identify the front cover, back cover, and title page of a book.	**LC.RI.K.5a** Distinguish front of book from back of book. **LC.RI.K.5b** Identify the title of an informational text or the title page. **LC.RI.K.5c** Identify the title of a story or poem or the title page.
RI.K.6 With prompting and support, define the role of the author and the illustrator of a text in presenting the ideas or information in a text.	**LC.RI.K.6** Identify the author's purpose in an informational text.
RI.K.7 With prompting and support, make connections between the illustrations and the text.	**LC.RI.K.7a** Identify a labeled photo or diagram or graphic from within an informational text. **LC.RI.K.7b** With prompting and support, interpret the information provided in photos or diagrams or graphics and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
RI.K.8 With prompting and support, identify the reason(s) an author gives to support point(s) in a text.	**LC.RI.K.8** With prompting and support, identify the facts an author gives to support points in a text.
RI.K.9 With prompting and support, identify similarities and differences between two texts on the same topic.	**LC.RI.K.9** With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., imaginary or real bear; photo versus illustration of something not real).
RI.K.10 Actively engage in group reading activities with purpose and understanding.	**LC.RI.K.10a** Choose an informational text to read and reread, listen to, or view for leisure or informational purposes (e.g., to answer questions; understand the world around them). **LC.RI.K.10b** Engage in group reading of informational text by sharing something learned or something enjoyed.
RF.K.1 Demonstrate understanding of the organization and basic features of print.	**LC.RF.K.1a** During shared reading activities, point to text from top to bottom of page and left to right.

a. Follow words from left to right, top to bottom, and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper-and lowercase letters of the alphabet.	**LC.RF.K.1b** During shared reading activities, indicate need to turn the page for continued reading. **LC.RF.K.1c** Distinguish individual letters from words. **LC.RF.K.1d** Identify familiar written words when spoken (e.g., Show me the word "Tony"). **LC.RF.K.1e** Recognize that words are separated by spaces in print. **LC.RF.K.1f** Identify or name uppercase letters of the alphabet.
RF.K.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words. b. Count, pronounce, blend, and segment syllables in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (This does not include CVCs ending with /l/, /r/, or /x/.) e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	**LC.RF.K.2a** Recognize rhyming words. **LC.RF.K.2b** Produce rhyming words. **LC.RF.K.2c** Count syllables in spoken words. **LC.RF.K.2d** Blend and segment onsets and rimes of single-syllable spoken words. **LC.RF.K.2e** Blend and segment syllables in spoken words. **LC.RF.K.2f** Isolate initial sounds in consonant-vowel-consonant (CVC) words (not including blends). **LC.RF.K.2g** Isolate final sounds in consonant-vowel-consonant (CVC) words (not including blends). **LC.RF.K.2h** Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.
RF.K.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound(s) for each consonant. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. c. Read common high-frequency words by sight (e.g., *the*, *of*, *to*, *you*, *she*, *my*, *is*, *are*, *do*, *does*). d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	**LC.RF.K.3a** Recognize the primary sound(s) for each consonant. **LC.RF.K.3b** Produce the primary sound(s) for each consonant. **LC.RF.K.3c** Identify the long and short vowel sounds in common spellings for the five major vowel sounds. **LC.RF.K.3d** Read common kindergarten high frequency words by sight. **LC.RF.K.3e** Identify the sound that differs between two similarly spelled words.

RF.K.4 Read emergent-reader texts with purpose and understanding.	**LC.RF.K.4** Participate in reading emergent-reader texts.
W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is . . .).	**LC.W.K.1a** Write, draw, or dictate the topic they are communicating about. **LC.W.K.1b** Write, draw, or dictate the name of a book of interest. **LC.W.K.1c** Produce a statement which states an opinion or preference about the topic or book of interest.
W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	**LC.W.K.2a** With prompting and support, create an informative/explanatory permanent product (e.g., select/generate words to form a sentence or two) which names the topic they are communicating about and supplies some information about the topic. **LC.W.K.2b** Describe information gained from a stimulus (e.g., text, event, photo, etc.).
W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	**LC.W.K.3a** Generate story ideas in response to a stimulus (e.g., event, photo, text, daily writing log). **LC.W.K.3b** Write, dictate, or draw about an event. **LC.W.K.3c** Organize the details of an event in the order in which they occurred.
W.K.4 Begins in grade 3.	
W.K.5 With guidance and support, orally respond to questions and suggestions from adults and peers and add details to strengthen writing as needed.	**LC.W.K.5a** With guidance and support from adults, use feedback to strengthen permanent products (e.g., add a drawing or detail).
W.K.6 With guidance and support from adults and peers, explore a variety of digital tools by participating in the production of a published writing.	**LC.W.K.6** With guidance and support from adults, explore a variety of digital tools to produce and publish permanent products, including collaborating with peers.
W.K.7 With guidance and support from adults, participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	**LC.W.K.7** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).

W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	**LC.W.K.8a** With guidance and support from adults, recall information from experiences to answer a question. **LC.W.K.8b** Identify various sources (e.g., word wall, book talks, visuals/images, Internet) that can be used to gather information or to answer a question (e.g., "How do we find out?"). **LC.W.K.8c** Use provided illustrations or visual displays to gain information on a topic. **LC.W.K.8d** With guidance and support from adults, gather information (e.g., highlight in text, quote or paraphrase from discussion) from provided sources to answer a question.
W.K.9 Begins in grade 4.	
W.K.10 Begins in grade 3.	
SL.K.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.	**LC.SL.K.1** Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	**LC.SL.K.2a** With prompting and support, confirm understanding of a text read aloud or information presented orally or through other media by requesting clarification if something is not understood. **LC.SL.K.2b** Confirm understanding of a text read aloud or information presented orally or through other media by answering questions about key details.

SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	**LC.SL.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	**LC.SL.K.4a** Describe familiar people, places, things, and a single event or series of events. **LC.SL.K.4b** With prompting and support, provide additional details to describe familiar people, places, things, and events. **LC.SL.K.4c** Describe factual information about familiar people, places, things, and events.
SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.	**LC.SL.K.5** Use drawings or visual displays to add detail to written products or oral discussions.
SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.	**SL.K.6** Share information from a selected permanent product or a favorite text.
L.K.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog*, *dogs*; *wish*, *wishes*). d. Understand and use question words (interrogatives) (e.g., *who*, *what*, *where*, *when*, *why*, *how*). e. Use the most frequently occurring prepositions (e.g., *to*, *from*, *in*, *out*, *on*, *off*, *for*, *of*, *by*, *with*). f. Produce and expand complete sentences in shared language activities.	**LC.L.K.1a** Produce many upper- and lowercase letters. **LC.L.K.1b** Use high frequency nouns when communicating. **LC.L.K.1c** Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog*, *dogs*; *wish*, *wishes*). **LC.L.K.1d** Produce complete sentences in shared language activities.
L.K.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize the first word in a sentence and the pronoun I. b. Recognize and name end punctuation.	**LC.L.K.2a** Capitalize the first word in a sentence and the pronoun "I". **LC.L.K.2b** Produce a letter or letters for most consonant and short-vowel sounds (phonemes).

c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	
L.K.3 Begins in grade 2.	
L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. a. With guidance and support, identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb *to duck*). b. With guidance and support, use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.	**LC.L.K.4a** Identify new meanings for familiar words. **LC.L.K.4b** Identify an affix or inflectional ending for a frequently occurring word. **LC.L.K.4c** Identify the meaning of common inflections and affixes. **LC.L.K.4d** Use meanings of common inflections and affixes as a clue to the meaning of an unknown word.
L.K.5 With guidance and support from adults, explore word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). c. Identify real-life connections between words and their use (e.g., note places at school that are colorful). d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.	**LC.L.K.5a** With guidance and support from adults, sort objects into categories (e.g., shapes, food) to gain a sense of the concepts the categories represent**.** **LC.L.K.5b** With guidance and support from adults, match the opposites for frequently used verbs and adjectives. **LC.L.K.5c** With guidance and support from adults, use newly acquired words in real-life context**.**
L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	**LC.L.K.6a** Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Grade 1 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.1.1 Ask and answer questions about key details in a text.	**LC.RL.1.1a** Answer questions about key details in a story (e.g., who, what, when, where, why). **LC.RL.1.1b** Ask questions about key details in a familiar story.
RL.1.2a Retell stories, including key details. **RL.1.2b** Recognize and understand the central message or lesson.	**LC.RL.1.2a** Retell a favorite text, including key details. **LC.RL.1.2b** Use details to tell what happened in a story. **LC.RL.1.2c** Retell the sequence of events in a story.
RL.1.3 Describe characters, settings, and major events in a story, using key details.	**LC.RL.1.3a** Answer questions about the beginning, middle, and end of a story. **LC.RL.1.3b** Use signal words (e.g., first, next, after, before) and text details to describe events of a story. **LC.RL.1.3c** Identify and/or describe the characters from a story. **LC.RL.1.3d** Identify and/or describe a major event (e.g., problem or solution) from a story. **LC.RL.1.3e** Answer questions regarding key events of stories. **LC.RL.1.3f** Identify and/or describe a setting in a story. **LC.RL.1.3g** Describe feelings of characters in a story.
RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.	**LC.RL.1.4a** Ask questions to help determine or clarify the meaning of words in a text. **LC.RL.1.4b** Answer questions to help determine or clarify the meaning of words in a text. **LC.RL.1.4c** Ask questions to help determine or clarify the meaning of phrases in a text. **LC.RL.1.4d** Answer questions to help determine or clarify the meaning of phrases in a text.
RL.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.	**LC.RL.1.5a** Read books to examine how certain genres are written. **LC.RL.1.5b** Identify the purpose of storybooks and informational text.

RL.1.6 Identify who is telling the story at various points in a text.	**LC.RL.1.6** Identify who is telling the story in a text.
RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.	**LC.RL.1.7a** Use text features to aid comprehension. **LC.RL.1.7b** Explain a key illustration in the story. **LC.RL.1.7c** Use illustrations and details in a story to describe its characters, setting, or events.
RL.1.8 (Not applicable to literature) [3]	**N/A**
RL.1.9 Compare and contrast the adventures and experiences of characters in stories.	**LC.RL.1.9** Compare and contrast (what is the same and what is different) the experiences of characters in stories.
RL.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1.	**LC.RL.1.10a** Choose literary texts or poems to read and reread, listen to, or view for leisure purposes. **LC.RL.1.10b** Engage in group reading of stories or poems by sharing something learned or something enjoyed.
RI.1.1 Ask and answer questions about key details in a text.	**LC.RI.1.1** Answer questions about key details in a text read, read aloud, or viewed.
RI.1.2 Identify the main topic and retell key details of a text.	**LC.RI.1.2a** Discuss key details and main topic of a preferred text. **LC.RI.1.2b** Identify the main topic of an informational text. **LC.RI.1.2c** Retell/identify key details in an informational text.
RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.	**LC.RI.1.3** Describe the connection between two individuals, events, or pieces of information in a text.
RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	**LC.RI.1.4a** Ask questions to help determine or clarify the meaning of words in a text.

[3] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

	LC.RI.1.4b Answer questions to help determine or clarify the meaning of words in a text. **LC.RI.1.4c** Ask questions to help determine or clarify the meaning of phrases in a text. **LC.RI.1.4d** Answer questions to help determine or clarify the meaning of phrases in a text.
RI.1.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	**LC.RI.1.5a** Identify text features to aid comprehension. **LC.RI.1.5b** Use text features to aid comprehension. **LC.RI.1.5c** Identify and use various text features (e.g., bold text, titles) to locate key facts or information in a text.
RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.	**LC.RI.1.6** Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
RI.1.7 Use the illustrations and details in a text to describe its key ideas.	**LC.RI.1.7** Use the photos, diagrams, or graphics and details in a text to describe or identify its key ideas.
RI.1.8 Identify the reasons an author gives to support points in a text.	**LC.RI.1.8** Identify the facts and details an author gives to support points in a text.
RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	**LC.RI.1.9** Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
RI.1.10 With prompting and support read informational texts appropriately complex for grade 1.	**LC.RI.1.10a** Choose informational texts to read and reread, listen to, or view for leisure or informational purposes (e.g., to answer questions; understand the world around them). **LC.RI.1.10b** Engage in group reading of informational text by sharing something learned or something enjoyed.
RF.1.1 Demonstrate understanding of the organization and basic features of print.	**LC.RF.1.1a** Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).	**LC.RF.1.1b** During shared reading activities, point to text from top to bottom of page, left to right, or to match a spoken (i.e., orally read) word to a written word in various types of text. **LC.RF.1.1c** Distinguish individual letters from words; distinguish letters from punctuation marks; and distinguish words from sentences. **LC.RF.1.1d** Recognize that words are separated by spaces in print. **LC.RF.1.1e** Identify or name uppercase letters of the alphabet. **LC.RF.1.1f** Identify or name lowercase letters of the alphabet.
RF.1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words. b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).	**LC.RF.1.2a** Recognize rhyming words. **LC.RF.1.2b** Produce rhyming words. **LC.RF.1.2c** Identify long or short vowel sounds in spoken single-syllable words. **LC.RF.1.2d** Produce single-syllable words by blending sounds (phonemes), including consonant blends. **LC.RF.1.2e** Isolate and/or produce initial in consonant-vowel-consonant (CVC) words. **LC.RF.1.2f** Isolate and/or produce medial vowel sound in consonant-vowel-consonant (CVC) words. **LC.RF.1.2g** Isolate and/or produce final sounds in consonant-vowel-consonant (CVC) words. **LC.RF.1.2h** Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).
RF.1.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs. b. Decode regularly spelled one-syllable words. c. Know final -e and common vowel team conventions for representing long vowel sounds. d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. e. Decode two-syllable words following basic patterns by breaking the words into syllables.	**LC.RF.1.3a** Recognize the sound(s) for each consonant. **LC.RF.1.3b** Produce the sound(s) for each consonant. **LC.RF.1.3c** Identify common consonant digraphs using their sound correspondence (e.g., write/state/select "ch" when spoken). **LC.RF.1.3d** Decode regularly spelled CVC words. **LC.RF.1.3e** Recognize silent “e” as the reason the vowel sound is a long vowel sound in a word. **LC.RF.1.3f** Read common first grade high frequency words by sight. **LC.RF.1.3g** Read or identify frequently occurring words with inflectional endings. **LC.RF.1.3h** Recognize grade-appropriate irregularly spelled words.

f. Read words with inflectional endings. g. Recognize and read grade-appropriate irregularly spelled words.	**LC.RF.1.3i** Identify the sound that differs between two similarly spelled words.
RF.1.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**LC.RF.1.4a** Read grade-level text with accuracy, appropriate rate, and expression (when applicable) on successive readings. **LC.RF.1.4b** Identify grade-level words with accuracy and appropriate rate on successive attempts. **LC.RF.1.4c** Practice self-monitoring strategies to aid comprehension (e.g., reread, use visuals or cueing system, self-correct, ask questions, confirm predictions).
W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	**LC.W.1.1a** Produce an opinion statement about a topic or book of interest and provide accurate information as a reason. **LC.W.1.1b** Organize an opinion piece starting with an opinion statement followed by a reason. **LC.W.1.1c** Use a description of or detail about familiar people, places, things, and events to support an opinion. **LC.W.1.1d** Create an opinion piece that provides a sense of closure.
W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	**LC.W.1.2a** Produce a simple statement that names a topic and supplies some facts about the topic. **LC.W.1.2b** When creating informative/explanatory permanent products, represent facts and descriptions through the use of illustrations and captions. **LC.W.1.2c** Provide a sense of closure to an informative/explanatory permanent product.
W.1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	**LC.W.1.3a** Provide a title that tells the central idea or focus. **LC.W.1.3b** Describe a single event or a series of events that includes details about what happened. **LC.W.1.3c** Describe a series of events in the order in which they occurred, and when appropriate, use signal words (e.g., *first*, *then*, *next*). **LC.W.1.3d** Create a narrative permanent product that provides a sense of closure.

W.1.4 Begins in grade 3.	
W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.	**LC.W.1.5** With guidance and support from adults, use feedback to strengthen permanent products (e.g., add a drawing or detail, reorder events).
W.1.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	**LC.W.1.6** With guidance and support from adults, use a variety of digital tools (e.g., word processing, internet) to produce and publish permanent products, including collaborating with peers.
W.1.7 Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).	**LC.W.1.7a** Participate in shared research and writing projects (e.g., drawings, visual displays, labels). **LC.W.1.7b** Generate ideas and or opinions when participating in shared writing projects.
W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	**LC.W.1.8a** With guidance and support from adults, recall information from experiences to answer a question. **LC.W.1.8b** Identify various sources (e.g., word wall, book talks, visuals/images, Internet) that can be used to gather information or to answer questions (e.g., "How do we find out?"). **LC.W.1.8c** Use illustrations and details in a text to obtain facts and compose information on a topic. **LC.W.1.8d** With guidance and support from adults, gather information (e.g., highlight in text, quote or paraphrase from discussion) from provided sources to answer a question.
W.1.9 Begins in grade 4.	
W.1.10 Begins in grade 3.	
SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.	**LC.SL.1.1a** Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up any confusion about the topics and texts under discussion.	**LC.SL.1.1b** Build on others' talk in conversations by responding to the comments of others through multiple exchanges. **LC.SL.1.1c** Ask questions to clear up any confusion about the topics or texts under discussion. **LC.SL.1.1d** Engage in small or large group discussions by sharing one's own permanent product.
SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	**LC.SL.1.2a** Engage in small or large group discussion of favorite texts or topic presented orally or through other media. **LC.SL.1.2b** Answer questions about key details in a story (e.g., *who, what, when, where, why*). **LC.SL.1.2c** Ask questions about key details in a familiar story.
SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	**LC.SL.1.3** Ask questions about information presented orally in order to clarify something that is not understood.
SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	**LC.SL.1.4a** Retell a favorite text, including key details. **LC.SL.1.4b** Describe people, places, things, and a single event or series of events with relevant details. **LC.SL.1.4c** Describe factual information and ideas about familiar people, places, things, and events. **LC.SL.1.4d** Describe subtopics of larger topics about familiar people, places, things, and events.
SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.	**LC.SL.1.5** Use drawings or visual displays to add detail to permanent products.
SL.1.6 Produce complete sentences when appropriate to task, audience, and situation.	**LC.SL.1.6b** Produce complete sentences (e.g., through dictation, writing, word array, picture) when appropriate to task and situation.

L.1.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. a. Legibly print all upper- and lowercase letters. b. Use common, proper, and possessive nouns. c. Use singular and plural nouns with matching verbs in basic sentences (e.g., "He hops"; "We hop."). d. Use personal and possessive pronouns (e.g., *I*, *me*, *my*, *they*, *them*, *their*). e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home). f. Use frequently occurring adjectives. g. Use frequently occurring conjunctions (e.g., *and*, *but*, *or*, *so*, *because*). h. Use determiners (e.g., articles, demonstratives). i. Use frequently occurring prepositions (e.g., *during*, *beyond*, *toward*). j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	**LC.L.1.1a** Produce upper- and lowercase letters. **LC.L.1.1b** Use singular and plural nouns with matching verbs in basic sentences. **LC.L.1.1c** Use frequently occurring nouns when communicating. **LC.L.1.1d** Use personal, possessive, and indefinite pronouns (e.g., *I, me, my; they, them, their; anyone, everything*) when communicating. **LC.L.1.1e** Use verbs to convey a sense of past present or future when communicating. **LC.L.1.1f** Use frequently occurring adjectives when communicating. **LC.L.1.1g** Use frequently occurring conjunctions (e.g., *and, but, or, so, because*) when communicating. **LC.L.1.1h** Use frequently occurring prepositions (e.g., *on, in*) when communicating. **LC.L.1.1i** Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize dates and names of people. b. Use end punctuation for sentences. c. Use commas in dates and to separate single words in a series. d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.	**LC.L.1.2a** Capitalize the first word in sentence, the pronoun "I", dates, and names of people. **LC.L.1.2b** Use end punctuation for sentences. **LC.L.1.2c** Produce a letter or letters for consonant and vowel sounds (phonemes).
L.1.3 Begins in grade 2.	

L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Use knowledge of frequently occurring affixes (prefixes and suffixes) to interpret the meaning of a word. c. Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks*, *looked*, *looking*).	**LC.L.1.4a** Use context within a sentence as a clue to the meaning of a word or phrase. **LC.L.1.4b** Use frequently occurring affixes as a clue to the meaning of the word.
L.1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes). c. Identify real-life connections between words and their use (e.g., note places at home that are cozy). d. Distinguish shades of meaning among verbs differing in manner (e.g., *look*, *peek*, *glance*, *stare*, *glare*, *scowl*) and adjectives differing in intensity (e.g., *large*, *gigantic*) by defining or choosing them or by acting out the meanings.	**LC.L.1.5a** With guidance and support from adults, identify the category for a given word (e.g., a duck is a bird). **LC.L.1.5b** With guidance and support from adults, sort labeled objects into categories (e.g., shapes, food) to gain a sense of the concepts the categories represent. **LC.L.1.5c** With guidance and support from adults, sort words or picture cards with words into categories (e.g., shapes, food) to gain a sense of the concepts the categories represent. **LC.L.1.5d** With guidance and support from adults, use newly acquired words in real-life context.
L.1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., *because*).	**LC.L.1.6a** Use words and phrases acquired through conversations, reading and being read to, and responding to texts, or when adding captions or simple sentences to illustrations or drawings, including using frequently occurring conjunctions to signal simple relationships (e.g., *because*). **LC.L.1.6b** Use frequently occurring conjunctions to signal simple relationships**.**

Grade 2 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	**LC.RL.2.1** Answer *who, what, where, when, why,* and *how* questions from stories.
RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	**LC.RL.2.2a** Use details to recount stories, including fables and folktales from diverse cultures.**LC.RL.2.1b** Retell a favorite text, including key details.
RL.2.3 Describe how characters in a story respond to major events and challenges.	**LC.RL.2.3a** Describe or select a description of a major event or problem in a story. **LC.RL.2.3b** Describe or select a description of how characters respond to major events or problems in a story.
RL.2.4 Describe how words and phrases supply rhythm and meaning in a poem or song; determine the meaning of words and phrases as they are used in text.	No Louisiana Connectors developed for this standard.
RL.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.	**LC.RL.2.5a** Describe or select the description of what happened (or key events from) in the beginning of the story. **LC.RL.2.5b** Describe or select the description of what happened (or key events from) in the end of the story. **LC.RL.2.5c** Use signal words (e.g., *then, while, because, when, after*, *before, later*) to describe event sequence, actions, and interactions in a story. **LC.RL.2.5d** Read books to examine how to write certain genres.
RL.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	**LC.RL.2.6** Identify different points of view of different characters in a story. (e.g., “Who thinks it is a bad idea to play a joke on a friend?”)
RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.	**LC.RL.2.7a** Use illustrations to answer questions about the characters, key events, the problem or solution in a story.

	LC.RL.2.7b Use information gained from illustrations to describe elements within the setting. **LC.RL.2.7c** Use information gained from illustrations to describe a character's feelings or what a character wanted. **LC.RL.2.7d** Use information gained from illustrations to describe a relationship between characters (e.g., mother/daughter, love/hate). **LC.RL.2.7e** Use text features to aid comprehension.
RL.2.8 (Not applicable to literature) [4]	
RL.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.	**LC.RL.2.9a** Compare and contrast illustrations or visuals between two versions of the same story (e.g., Cinderella stories) by different authors or from different cultures. **LC.RL.2.9b** Compare and contrast characters or events between two versions of the same story by different authors or from different cultures.
RL.2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RL.2.10** Choose literary texts or poems to read and reread, listen to, or view for leisure purposes.
RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	**LC.RI.2.1** Answer *who*, *what*, *where*, *when*, *why*, and *how* questions from informational text.
RI.2.2 Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.	**LC.RI.2.2a** Identify the main topic of a multi-paragraph informational text. **LC.RI.2.2b** Identify the focus of a paragraph and the details that support the focus in an informational text.
RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	**LC.RI.2.3a** Identify the sequence of events in an informational text. **LC.RI.2.3b** Identify the steps in a process in an informational text.

[4] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

	LC.RI.2.3c Identify the cause and effect relationships in an informational text.
RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.	**LC.RI.2.4** Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area**.**
RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.	**LC.RI.2.5** Identify and use text features (e.g., title, bold print, illustrations, glossaries) to aid comprehension (e.g., locate key facts or information in a text efficiently).
RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.	**LC.RI.2.6** Identify the main purpose of a text, including what question the author is answering, explaining, or describing.
RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	**LC.RI.2.7a** Explain or identify what specific images (e.g., a diagram showing how a machine works) teach or inform the reader. **LC.RI.2.7b** Use the illustrations and details in a text to describe or identify its key ideas.
RI.2.8 Describe how reasons or evidence support specific points the author makes in a text.	**LC.RI.2.8a** Identify the facts and details an author gives to support points in a text. **LC.RI.2.8b** Describe how facts and details support specific points the author makes in a text.
RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.	**LC.RI.2.9** Compare and contrast the most important points presented by two texts on the same topic.
RI.2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RI.2.10a** Choose informational texts to read and reread, listen to, or view for leisure or informational purposes (e.g., to answer questions; understand the world around them). **LC.RI.2.10b** Discuss key details and main topic of a preferred text.
RF.2.1 Mastered in grade 1.	

RF.2.2 Mastered in grade 1.	**LC.RF.2.2a** Produce single-syllable words by blending sounds (phonemes), including consonant blends. **LC.RF.2.2b** Isolate and/or produce initial, medial vowel, and/or final sounds in consonant-vowel-consonant (CVC) words. **LC.RF.2.2c** Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).
RF.2.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Distinguish long and short vowels when reading regularly spelled one-syllable words. b. Know spelling-sound correspondences for additional common vowel teams. c. Decode regularly spelled two-syllable words with long vowels. d. Decode words with common prefixes and suffixes. e. Identify words with inconsistent but common spelling-sound correspondences. f. Recognize and read grade-appropriate irregularly spelled words.	**LC.RF.2.3a** Identify long and short vowels in regularly spelled one-syllable words. **LC.RF.2.3b** Decode regularly spelled one-syllable words with long vowels. **LC.RF.2.3c** Decode regularly spelled two-syllable words with long vowels. **LC.RF.2.3d** Decode words with common prefixes and suffixes. **LC.RF.2.3e** Recognize and/or read grade appropriate irregularly spelled words. **LC.RF.2.3f** Read or identify frequently occurring root words with and without inflectional endings.
RF.2.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**LC.RF.2.4a** Read grade-level text with accuracy, appropriate rate, and expression (when applicable) on successive readings. **LC.RF.2.4b** Identify grade-level words with accuracy and on successive attempts. **LC.RF.2.4c** Practice self-monitoring strategies to aid comprehension (e.g., reread, use visuals or cueing system, self-correct, ask questions, confirm predictions). **LC.RF.2.4d** Use context to confirm or self-correct word recognition.
W.2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.	**LC.W.2.1a** Produce an opinion statement about a topic or book of interest, supply reasons that support the opinion, and provide a concluding statement. **LC.W.2.1b** Connect reasons to the opinion using linking words.

	LC.W.2.1c Organize an opinion piece starting with an opinion statement followed by related reasons and ending with a concluding statement.
W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.	**LC.W.2.2a** Produce a statement that names a topic and supplies some facts about the topic. **LC.W.2.2b** When creating information/explanatory permanent products represent facts and descriptions through the use of illustrations and captions. **LC.W.2.2c** Order factual statements to describe a sequence of events or explain a procedure. **LC.W.2.2d** Provide a concluding statement or section to an informative/explanatory permanent product.
W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	**LC.W.2.3a** Provide a title that tells the central idea or focus. **LC.W.2.3b** Describe a single event or series of events by including actions, thoughts, or feelings about *who*, *what*, and *why*. **LC.W.2.3c** Describe a series of events in the order in which they occurred, and when appropriate, use signal words (e.g., *first*, *then*, *next*). **LC.W.2.3d** Create a narrative permanent product that provides a sense of closure.
W.2.4 Begins in grade 3.	
W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.	**LC.W.2.5** With guidance and support from adults, use feedback to strengthen permanent products (e.g., add more details or description).
W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	**LC.W.2.6** With guidance and support from adults, use a variety of digital tools (e.g., word processing, Internet) to produce and publish permanent products, including collaborating with peers.
W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).	**LC.W.2.7a** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).

	LC.W.2.7b Generate ideas and or opinions when participating in shared writing projects.
W.2.8 Recall information from experiences or gather information from provided sources to answer a question.	**LC.W.2.8a** Recall information from experiences to answer a question. **LC.W.2.8b** With guidance and support from adults, gather information (e.g., highlight in text, quote or paraphrase from discussion) from provided sources to answer a question. **LC.W.2.8c** Use simple note-taking strategies (e.g., double entry journal, Venn diagram, T-chart, discussion web) to record reasons for or against a topic. **LC.W.2.8d** Create a permanent product (e.g., T-chart, word sort) to distinguish facts and opinion. **LC.W.2.8e** Use simple note-taking strategies or organizers (e.g., numbering, t-charts, graphic organizers) to gather information from provided sources.
W.2.9 Begins in grade 4.	
W.2.10 Begins in grade 3.	
SL.2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.	**LC.SL.2.1a** Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and text under discussion). **LC.SL.2.1b** Build on others' talk in conversations by linking their comments to the remarks of others. **LC.SL.2.1c** Engage in small or large group discussions by sharing one's own permanent product.
SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.	**LC.SL.2.2a** Engage in small or large group discussion of favorite texts presented orally or through other media.

	LC.SL.2.2b Recount or describe key ideas or details from literary text read aloud or information presented orally or through other media.
SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.	**LC.SL.2.3** Ask questions about information presented orally in order to clarify something that is not understood.
SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.	**LC.SL.2.4a** Share a story or recount an experience with appropriate facts and relevant, descriptive details. **LC.SL.2.4b** Describe factual information and ideas about people, places, things, and a single event or series of events. **LC.SL.2.4c** Provide at least two facts for each subtopic identified for a larger topic. **LC.SL.2.4d** Describe a single event or a series of events by including actions, thoughts, or feelings.
SL.2.5 Create audio recordings of stories or poems with guidance and support from adults and/or peers; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.	**LC.SL.2.5** Use drawings or other visual displays to clarify ideas, thoughts, and feelings.
SL.2.6 Produce complete sentences when appropriate to task, audience, and situation in order to provide requested detail or clarification.	**LC.SL.2.6** Produce complete sentences (e.g., through dictation, writing, word array, picture) when appropriate to task and situation.
L.2.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. a. Use collective nouns (e.g., group). b. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). c. Use reflexive pronouns (e.g., myself, ourselves) and indefinite pronouns (e.g., anyone, everything). d. Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told).	**LC.L.2.1a** Use collective and irregular plural nouns when communicating. **LC.L.2.1b** Use past tense irregular verbs when communicating. **LC.L.2.1c** Use reflexive pronouns (e.g., myself, ourselves) when communicating. **LC.L.2.1d** Use adjectives and adverbs when communicating. **LC.L.2.1e** Produce and expand upon simple or compound sentences.

e. Use adjectives and adverbs, and choose between them depending on what is to be modified. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).	
L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic names. b. Use commas in greetings and closings of letters. c. Use an apostrophe to form contractions and frequently occurring possessives. d. Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil). e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	**LC.L.2.2a** Capitalize dates, names of people, holidays, product names, and geographic names. **LC.L.2.2b** Use conventional spelling for words with common spelling patterns.
L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Compare formal and informal uses of English.	No Louisiana Connectors developed for this standard
L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).	**LC.L.2.4a** Use sentence context as a clue to the meaning of a word or phrase. **LC.L.2.4b** Determine the meaning of a new word formed when a known prefix is added to the known word or root. **LC.L.2.4c** Use a known root word as a clue to the meaning of an unknown word with the same root. **LC.L.2.4d** Use knowledge of the meaning of individual words to predict the meaning of compound words. **LC.L.2.4e** Use a glossary or beginning dictionary to determine the meaning of a word.

d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark). e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.	
L.2.5 Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy). b. Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).	**LC.L.2.5a** Use newly acquired words in real-life context. **LC.L.2.5b** Distinguish shades of meaning among related verbs and adjectives by defining them or acting out their meaning.
L.2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).	**LC.L.2.6a** Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy, that makes me happy). **LC.L.2.6b** Identify connections with previously understood words to acquire the meaning of a new word (e.g., *weeping* is like *crying*). **LC.L.2.6c** Use newly acquired words in real-life context. **LC.L.2.6d** Use adjectives to describe nouns. **LC.L.2.6e** Use adverbs to describe verbs.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	**LC.RL.3.1a** Answer questions related to the relationship between characters, setting, events, or conflicts (e.g., characters and events, characters and conflicts, setting and conflicts). **LC.RL.3.1b** Answer questions (literal and inferential) and refer to text to support your answer. **LC.RL.3.1c** Support inferences, opinions, and conclusions using evidence from the text including illustrations.
RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.	**LC.RL.3.2a** Identify the central message (theme), lesson, or moral within a story, folktale, or fable from diverse cultures. **LC.RL.3.2b** Use details to recount stories, including fables and folktales from diverse cultures. **LC.RL.3.2c** Use information in the text to determine and explain a lesson learned by a character or theme within the story.
RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.	**LC.RL.3.3a** Explain how characters' actions contribute to the sequence of events/plot. **LC.RL.3.3b** Describe a character's traits in a story using details from the text and illustrations. **LC.RL.3.3c** Explain a character's motivation in a story using the character's thoughts, words, and actions as evidence from the text. **LC.RL.3.3d** Explain a character's feelings in a story using the character's thoughts, words, and actions as evidence from the text. **LC.RL.3.3e** Describe how a character changed in a story (e.g., different words, thoughts, feelings, actions). **LC.RL.3.3f** Analyze how a character's point of view influences a conflict within a text.
RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from non-literal language.	**LC.RL.3.4a** Determine the meaning of literal and nonliteral words and phrases as they are used in a text**.**

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
	LC.RL.3.4b Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.	**LC.RL.3.5a** Identify how the structure of a poem is different than a story (e.g., rhyme shorter than stories; stanza instead of paragraph). **LC.RL.3.5b** Identify how the structure of a play is different than the structure of a story (e.g., text includes props; dialogue without quotation marks acts/scenes instead of chapter).
RL.3.6 Distinguish the student's point of view from that of the narrator or those of the characters.	**LC.RL.3.6a** Identify narrator or character's point of view. **LC.RL.3.6b** Identify own point of view. **LC.RL.3.6c** Distinguish their own point of view from that of the narrator or those of the characters.
RL.3.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).	**LC.RL.3.7a** Support inferences, opinions, and conclusions using evidence from the text including illustrations**.** **LC.RL.3.7b** Use descriptive words and illustrations/visuals from a story, read or viewed, to explain the mood in a given part of the story.
RL.3.8 (Not applicable to literature) [5]	
RL.3.9 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).	**LC.RL.3.9** Compare two or more texts or adapted texts on the same topic or by the same author.

[5] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.3.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.	**LC.RL.3.10** Read or be read to and recount self-selected literary texts, such as stories, fables, folktales, myths, or adapted texts.
RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	**LC.RI.3.1a** Answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. **LC.RI.3.1b** Identify supporting details of an informational text read, read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.	**LC.RI.3.2a** Determine the main idea of text, read aloud, or information presented in diverse media and formats, including visually, quantitatively, and orally. **LC.RI.3.2b** Determine the main idea of a text; recount the key details and explain how they support the main idea. **LC.RI.3.2c** Identify facts that an author uses to support a specific point or opinion.
RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.	No Louisiana Connectors developed for this standard
RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.	**LC.RI.3.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	**LC.RI.3.5a** Identify the purpose of a variety of text features. **LC.RI.3.5b** Use text features (keywords, glossary) to locate information relevant to a given topic or question. **LC.RI.3.5c** Use tools (e.g., sidebars, icons, glossary) to locate information relevant to a given topic.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RI.3.6 Distinguish the student's point of view from that of the author of a text.	**LC.RI.3.6a** Identify the author's purpose in an informational text. **LC.RI.3.6b** Identify own point of view about a topic. **LC.RI.3.6c** Compare own point of view to that of the author.
RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).	**LC.RI.3.7a** Use illustrations (e.g., maps, photographs) in informational texts to answer questions. **LC.RI.3.7b** Identify information learned from illustrations and information learned from the words in an informational text. **LC.RI.3.7c** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). **LC.RI.3.7d** Within informational texts, locate or identify evidence in the text or graphics to support the central ideas.
RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	**LC.RI.3.8a** Identify signal words that help determine what the text structure is in an informational text. **LC.RI.3.8b** Describe the connection between sentences and paragraphs in a text.
RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.	**LC.RI.3.9a** Compare two or more texts on the same topic or by the same author. **LC.RI.3.9b** When researching a topic, compare and contrast the most important points and key details presented in two informational texts on the same topic.
RI.3.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.	**LC.RI.3.10** Read or be read to and recount self-selected informational texts or adapted texts.
RF.3.1 Mastered in grade 1.	

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RF.3.2 Mastered in grade 1.	
RF.3.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Identify and know the meaning of the most common prefixes and derivational suffixes. b. Decode words with common Latin suffixes. c. Decode multi-syllable words. d. Read grade-appropriate irregularly spelled words.	**LC.RF.3.3a** Identify the meaning of most common prefixes. **LC.RF.3.3b** Identify the meaning of most common suffixes. **LC.RF.3.3c** Decode regularly spelled one-syllable words with long vowels. **LC.RF.3.3d** Decode regularly spelled two-syllable words with long vowels. **LC.RF.3.3e** Decode multi-syllable words. **LC.RF.3.3f** Recognize and/or read grade appropriate irregularly spelled words.
RF.3.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**LC.RF.3.4a** Read text (including prose and poetry) with accuracy, appropriate rate, and expression (when applicable) on successive readings. **LC.RF.3.4b** Identify grade-level words with accuracy. **LC.RF.3.4c** Practice self-monitoring strategies to aid comprehension (e.g., reread, use visuals or cueing system, self-correct, ask questions, confirm predictions). **LC.RF.3.4d** Use context to confirm or self-correct word recognition.
W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section.	**LC.W.3.1a** Produce an opinion piece which introduces the topic or text they are communicating about and states an opinion. **LC.W.3.1b** Provide reasons that support the opinion. **LC.W.3.1c** Use linking words and phrases that connect the opinion and reasons. **LC.W.3.1d** Provide a concluding statement or section.
W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.	**LC.W.3.2a** Produce an informative/explanatory permanent product which Introduces a topic and groups related information together. **LC.W.3.2b** Develop the topic (i.e., offer additional information which supports the topic) by using facts, definitions, and details.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., *also*, *another*, *and*, *more*, *but*) to connect ideas within categories of information. d. Provide a concluding statement or section.	**LC.W.3.2c** Include illustrations to enhance clarity and meaning. **LC.W.3.2d** Use linking words and phrases (e.g., *also, another, and, more, but*) to connect ideas within categories of information. **LC.W.3.2e** Provide a concluding statement or section.
W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	**LC.W.3.3a** Produce a narrative permanent product which establishes a situation by setting up the context for the story and introducing a narrator and/or characters. **LC.W.3.3b** Sequence events that unfold naturally. **LC.W.3.3c** When appropriate, use dialogue and descriptions of actions, thoughts, and feelings to develop a story. **LC.W.3.3d** Use temporal words and phrases to signal event order. **LC.W.3.3e** Provide a sense of closure.
W.3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.	**LC.W.3.4** With guidance and support from adults, produce a permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to inform or entertain), or audience (e.g., reader).
W.3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	**LC.W.3.5a** With guidance and support from peers and adults, develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft). **LC.W.3.5b** With guidance and support from peers and adults, strengthen permanent products by revising (e.g., review a permanent product, strengthen a story by adding a description or dialogue). **LC.W.3.5c** With guidance and support from peers and adults, edit permanent products for clarity and meaning.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
W.3.6 With guidance and support from adults, produce and publish grade-appropriate writing using technology either independently or in collaboration with others.	**LC.W.3.6a** With guidance and support from adults, use technology to produce and publish permanent products (e.g., use the Internet to gather information; use word processing to generate and collaborate on permanent products).
W.3.7 Conduct short research projects that build knowledge about a topic.	**LC.W.3.7** Follow steps to complete a short research project (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	**LC.W.3.8a** Recall information from experiences to use in creating permanent products. **LC.W.3.8b** Gather information and facts (e.g., highlight in text, quote or paraphrase from discussion) from print (e.g., text read aloud, printed image) and/or digital sources (e.g., video, audio, images/graphics). **LC.W.3.8c** Use text features and search tools (e.g., keywords, sidebars, hyperlinks) to locate information relevant to a given topic with the purpose of creating a permanent product (e.g., select/generate responses to form a paragraph or essay). **LC.W.3.8d** Locate important points on a single topic from two informational texts or sources. **LC.W.3.8e** Identify key details in an informational text. **LC.W.3.8f** Take brief notes (e.g., graphic organizers, notes, labeling, listing) on sources. **LC.W.3.8g** Sort evidence collected from print and/or digital sources into provided categories.
W.3.9 Begins in grade 4.	
W.3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a	No Louisiana Connectors developed for this standard

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
day or two) for a range of discipline-specific tasks, purposes, and audiences.	
SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.	**LC.SL.3.1a** Provide evidence of being prepared for discussions on a topic or text through appropriate statements made during discussion. **LC.SL.3.1b** Ask questions to check understanding of information presented in collaborative discussions. **LC.SL.3.1c** Link personal ideas and comments to the ideas shared by others in collaborative discussions. **LC.SL.3.1d** Express ideas and understanding in light of collaborative discussions.
SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	**LC.SL.3.2a** Determine the central message, lesson, moral, and key details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. **LC.SL.3.2b** Determine the main idea of text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. **LC.SL.3.2c** Identify supporting details of an informational text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.	**LC.SL.3.3** Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	**LC.SL.3.4** Report on a topic, tell a story or recount an experience with appropriate facts and relevant, descriptive details.
SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.	**LC.SL.3.5** Add audio recordings and visual displays when appropriate to emphasize or enhance certain facts or details.
SL.3.6 Speak in complete sentences when appropriate to task, audience, and situation in order to provide requested detail or clarification.	No Louisiana Connectors developed for this standard
L.3.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., childhood). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement. g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.	**LC.L.3.1a** Identify nouns (regular, irregular, abstract), verbs (regular, irregular, simple tenses), adjectives, and/or adverbs within sentences. **LC.L.3.1b** Use nouns (regular, irregular, abstract), verbs (regular, irregular, simple tenses), and adjectives and/or adverbs when communicating. **LC.L.3.1c** Use correct subject-verb and pronoun-antecedent agreement when communicating. **LC.L.3.1d** Produce and expand upon simple and compound sentences.
L.3.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize appropriate words in titles. b. Use commas in addresses.	**LC.L.3.2a** Capitalize words in holidays, product names, geographic names, and appropriate words in titles. **LC.L.3.2b** Use commas accurately in addresses or dialogue when communicating.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
c. Use commas and quotation marks in dialogue. d. Form and use possessives. e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., *sitting, smiled, cries, happiness*). f. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing word. g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	**LC.L.3.2c** Use quotation marks when communicating. **LC.L.3.2d** Use conventional spelling and spelling patterns (e.g., *word families, syllable patterns, ending rules*) when communicating high frequency and/or previously learned words.
L.3.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases for effect. b. Recognize and observe differences between the conventions of spoken and written Standard English.	**LC.L.3.3** Choose words and phrases for appropriate effect (e.g., to inform) within writing.
L.3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on *grade 3 reading and content*, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., *agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat*). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *company, companion*). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.	**LC.L.3.4a** Use sentence context as a clue to the meaning of a new word, phrase, or multiple meaning word. **LC.L.3.4b** Determine the meaning of the new word formed when a known affix is added to a known word. **LC.L.3.4c** Use a known root word as a clue to the meaning of an unknown word with the same root. **LC.L.3.4d** Use a glossary or dictionary to determine the meaning of a word.
L.3.5 Demonstrate understanding of word relationships and nuances in word meanings.	**LC.L.3.5a** Distinguish literal from non-literal meanings of words and phrases in context.

Grade 3 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
a. Distinguish the literal and non-literal meanings of words and phrases in context (e.g., *take steps*). b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., *knew, believed, suspected, heard, wondered*).	**LC.L.3.5b** Use newly acquired words in real-life context. **LC.L.3.5c** Identify and sort shades of meaning words from general to specific or lesser to specific.
L.3.6 Acquire and use accurately grade-appropriate conversational, general academic and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., *After dinner that night we went looking for them*).	**LC.L.3.6a** Use newly acquired conversational and general academic words and phrases accurately when communicating. **LC.L.3.6b** Use newly acquired domain-specific words and phrases accurately when communicating.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	**LC.RL.4.1a** Refer to details and examples in a text when explaining what the text says explicitly. **LC.RL.4.1b** Refer to details and examples in a text when drawing basic inferences about a story, poem, or drama. **LC.RL.4.1c** Use details and examples in a text when explaining the author's purpose (e.g., what did the author use to scare you, surprise you?).
RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text.	**LC.RL.4.2a** Use evidence from the text to summarize a story, poem or drama. **LC.RL.4.2b** Determine the theme of a story, drama, or poem; refer to text to support answer.
RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	**LC.RL.4.3a** Answer questions related to the relationship between characters, setting, events, or conflicts (e.g., characters and events, characters and conflicts, setting and conflicts). **LC.RL.4.3b** Describe character traits (e.g., actions, deeds, dialogue, description, motivation, interactions); use details from text to support description. **LC.RL.4.3c** Describe character motivation (e.g., actions, thoughts, words); use details from text to support description.
RL.4.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.	**LC.RL.4.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 4 topic or subject area.
RL.4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.	**LC.RL.4.5a** Identify how the structure of a poem is different than a story (e.g., identify rhyme, shorter than stories; stanza instead of paragraph). **LC.RL.4.5b** Identify how the structure of a play is different than the structure of a story (e.g., text includes props; dialogue without quotation marks acts/scenes instead of chapter).

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.4.6 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	**LC.RL.4.6a** Determine the author's point of view (first- or third- person). **LC.RL.4.6b** Compare the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text.	**LC.RL.4.7a** Use evidence from both the text version and oral or visual presentation of the same text to support inferences, opinions, and conclusions. **LC.RL.4.7b** Make connections between the text of a story and the visual representations, refer back to text/illustrations to support answer. **LC.RL.4.7c** Make connections between the text of a play and the oral representations, refer back to text/illustrations to support answer.
RL.4.8 (Not applicable to literature) [6]	
RL.4.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	**LC.RL.4.9a** Compare the treatment of similar themes and topics (e.g., opposition of good and evil) in stories, myths, and traditional literature from different cultures. **LC.RL.4.9b** Compare the treatment of patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.
RL.4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RL.4.10** Read or be read to and recount self-selected literary texts, such as stories, dramas, poetry, or adapted texts.

[6] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	**LC.RI.4.1a** Refer to details and examples in a text when explaining what the text says explicitly. **LC.RI.4.1b** Refer to details and examples in a text when drawing basic inferences from an informational text.
RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.	**LC.RI.4.2a** Determine the main idea of an informational text. **LC.RI.4.2b** Identify supporting details of an informational text.
RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	No Louisiana Connectors developed for this standard
RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	**LC.RI.4.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 4 topic or subject area.
RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.	**LC.RI.4.5a** Identify signal words that help determine what the text structure is in an informational text (e.g., description, problem/solution, time/order, compare/contrast, cause/effect, directions. **LC.RI.4.5b** Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. **LC.RI.4.5c** Organize information presented in an informational text to demonstrate the text structure. **LC.RI.4.5d** Use text features (keywords, glossary) to locate information relevant to a given topic or question. **LC.RI.4.5e** Use tools (e.g., sidebars, icons, glossary) to locate information relevant to a given topic. **LC.RI.4.5f** Use search tools or text features as a means of locating relevant information.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RI.4.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	**LC.RI.4.6a** Determine if information in a text is firsthand or secondhand. **LC.RI.4.6b** Compare and contrast a firsthand and secondhand account of the same event or topic.
RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	**LC.RI.4.7a** Use information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) to answer questions. **LC.RI.4.7b** Explain how the information presented visually, orally, or quantitatively contributes to the understanding of the text in which it appears. **LC.RI.4.7c** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text.	**LC.RI.4.8a** Compare and contrast how different authors use reasons and evidence to support the same topics across texts. **LC.RI.4.8b** Identify reasons that the author uses to support ideas in an informational text. **LC.RI.4.8c** Identify facts that an author uses to support a specific point or opinion.
RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	**LC.RI.4.9a** Report out about two or more texts on the same self-selected topic. **LC.RI.4.9b** Identify the most important information about a topic gathered from two texts on the same topic in order to write or speak about the subject knowledgeably.
RI.4.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the	**LC.RI.4.10** Read or be read to and recount self-selected informational texts or adapted texts.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	
RF.4.1 Mastered in grade 1.	
RF.4.2 Mastered in grade 1.	
RF.4.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.	**LC.RF.4.3a** Use letter-sound correspondences, syllabication patterns, and morphology (e.g., affixes) to identify and/or read multisyllabic words. **LC.RF.4.3b** Identify grade level words with accuracy and on successive attempts. **LC.RF.4.3d** Recognize and/or read grade appropriate irregularly spelled words.
RF.4.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**LC.RF.4.4a** Read text (including prose and poetry) with accuracy, appropriate rate, and expression (when applicable) on successive readings. **LC.RF.4.4b** Practice self-monitoring strategies to aid comprehension (e.g., reread, use visuals or cueing system, self-correct, ask questions, confirm predictions). **LC.RF.4.4c** Use context to confirm or self-correct word recognition.
W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., *for instance*, *in order to*, *in addition*).	**LC.W.4.1a** Produce an opinion piece which introduces the topic or text, states an opinion, and groups related ideas together. **LC.W.4.1b** Provide reasons which include facts and details that support the stated opinion. **LC.W.4.1c** Link opinion and reasons using words and phrases (e.g., *for instance*, *in order to*, *in addition*). **LC.W.4.1d** Provide a concluding statement or section related to the opinion presented.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
d. Provide a concluding statement or section related to the opinion presented.	
W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another*, *for example*, *also*, *because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	**LC.W.4.2a** Produce an informative/explanatory permanent product which introduces a topic clearly and groups related information. **LC.W.4.2b** Develop the topic (i.e., add additional information related to the topic) with relevant facts, definitions, concrete details, quotations, or other information and examples related to the topic. **LC.W.4.2c** Include formatting (e.g., headings), illustrations, and multimedia when appropriate to convey information about the topic. **LC.W.4.2d** Link ideas within categories of information using words and phrases (e.g., *another*, *for example*, *also*, *because*). **LC.W.4.2e** Use precise language and domain-specific vocabulary to inform about or explain the topic. **LC.W.4.2f** Provide a concluding statement or section related to the information presented.
W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely.	**LC.W.4.3a** Produce a narrative permanent product which orients the reader by setting up the context for the story and introducing a narrator and/or characters. **LC.W.4.3b** Sequence events that unfold naturally. **LC.W.4.3c** When appropriate, use dialogue and description to develop experiences and events or show the responses of characters to situations. **LC.W.4.3d** Use a variety of transitional words and phrases to manage the sequence of events. **LC.W.4.3e** Use concrete words and phrases and sensory details to convey experiences and events.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
e. Provide a conclusion that follows from the narrated experiences or events.	**LC.W.4.3f** Provide a conclusion (e.g., concluding sentence, paragraph, or extended ending) that follows from the narrated experiences or events.
W.4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.	**LC. W.4.4a** Produce a clear coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to inform or entertain), and audience (e.g., reader).
W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	**LC.W.4.5a** With guidance and support from peers and adults, develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft). **LC.W.4.5b** With guidance and support from peers and adults, strengthen permanent products by revising (e.g., review a permanent product, strengthen an informative permanent product by adding a concrete detail). **LC.W.4.5c** With guidance and support from peers and adults, edit permanent products for clarity and meaning.
W.4.6 With guidance and support from adults, produce and publish grade-appropriate writing using technology either independently or in collaboration with others.	**LC.W.4.6** With guidance and support from adults, use technology to produce and publish permanent products (e.g., use the Internet to gather information; use word processing to generate and collaborate on permanent products).
W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.	**LC.W.4.7** Follow steps to complete a short research project (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	**LC.W.4.8a** Recall relevant information from experiences to use in creating permanent products. **LC.W.4.8b** Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from print (e.g., text read aloud,

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
	printed image) and/or digital sources (e.g., video, audio, images/graphics). **LC.W.4.8c** Identify key details from an informational text. **LC.W.4.8d** Take brief notes and categorize information (e.g., graphic organizers, notes, labeling, listing) from sources into provided categories. **LC.W.4.8e** Provide a list of sources that contributed to the creation of a permanent product.
W.4.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research. a. Apply *grade 4 Reading standards* to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). b. Apply *grade 4 Reading standards* to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	**LC.W.4.9** Provide evidence from texts when producing permanent products.
W.4.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	No Louisiana Connectors developed for this standard
SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.	**LC.SL.4.1a** Provide evidence of being prepared for discussions on a topic or text through appropriate statements made during discussion. **LC.SL.4.1b** Ask questions to check understanding of information presented in collaborative discussions. **LC.SL.4.1c** Make appropriate comments that contribute to a collaborative discussion. **LC.SL.4.1d** Review the key ideas expressed within a collaborative discussion.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	
SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	**LC.SL.4.2** Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.	**LC.SL.4.3** Identify the reasons and evidence a speaker provides to support particular points.
SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	**LC.SL.4.4a** Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details.
SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	**LC.SL.4.5** Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task, audience, and situation.	No Louisiana Connectors developed for this standard
L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (*who, whose, whom, which, that*) and relative adverbs (*where, when, why*).	**LC.L.4.1a** Use relative pronouns and relative adverbs when communicating. **LC.L.4.1b** Use prepositional phrases when communicating.

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
b. Form and use the progressive (e.g., *I was walking; I am walking; I will be walking*) verb tenses. c. Use modal auxiliaries (e.g., *can, may, must*) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., *a small red bag* rather than *a red small bag*). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. g. Correctly use frequently confused words (e.g., *to, too, two; there, their*).	**LC.L.4.1c** Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.
L.4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization. b. Use commas and quotation marks to mark direct speech and quotations from a text. c. Use a comma before a coordinating conjunction in a compound sentence. d. Spell grade-appropriate words correctly, consulting references as needed.	**LC.L.4.2a** Use correct capitalization when communicating. **LC.L.4.2b** Use commas and quotation marks when communicating. **LC.L.4.2c** Spell grade-appropriate words correctly in writing, consulting references as needed.
L.4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases to convey ideas precisely. b. Choose punctuation for effect. c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).	**LC.L.4.3** Choose words and phrases for appropriate effect (e.g., to inform) when communicating**.**

Grade 4 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 4 reading and content,* choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph, photograph, autograph*). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	**LC.L.4.4a** Use context to determine the meaning of unknown or multiple meaning words, or words showing shades of meaning. **LC.L.4.4b** Use common grade-appropriate roots and affixes as clues to the meaning of a word. **LC.L.4.4c** Use a glossary, dictionary, or thesaurus to determine the meaning of a word.
L.4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	**LC.L.4.5a** Identify simple similes in context. **LC.L.4.5b** Identify simple metaphors in context. **LC.L.4.5c** Relate words to their opposites (antonyms). **LC.L.4.5d** Relate words to words with similar but not identical meanings (synonyms). **LC.L.4.5e** Identify the meaning of common idioms.
L.4.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).	**LC.L.4.6a** Use grade-appropriate general academic and domain-specific words and phrases accurately when communicating.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.	**LC.RL.5.1a** Refer to details and examples in a text when explaining what the text says explicitly. **LC.RL.5.1b** Refer to specific text evidence to support inferences, interpretations, or conclusions.
RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	**LC.RL.5.2a** Summarize a portion of text such as a paragraph or a chapter. **LC.RL.5.2b** Summarize a text from beginning to end in a few sentences. **LC.RL.5.2c** Determine the theme of a story, drama, or poem including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic.
RL.5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).	**LC.RL.5.3a** Compare characters, settings, events within a story; provide or identify specific details in the text to support the comparison. **LC.RL.5.3b** Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
RL.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings.	**LC.RL.5.4** Determine the meaning of words and phrases as they are used in a text including figurative language such as metaphors and similes.
RL.5.5 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.	**LC.RL.5.5a** Use signal words (e.g., *meanwhile*, *unlike*, *next*) to identify common types of text structure (e.g., sequence, compare/contrast, cause/effect, description) within a text.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
	LC.RL.5.5b Explain how a series of chapters fits together to provide the overall structure of a particular text.
RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described.	**LC.RL.5.6a** Describe how a narrator's or speaker's point of view influences how events are described. **LC.RL.5.6b** Explain how the description of characters, setting, or events might change if the person telling the story changed. **LC.RL.5.6c** Interpret the meaning of metaphors and similes to help explain the setting within a text. **LC.RL.5.6d** Interpret the meaning of metaphors and similes to help determine the mood within a text.
RL.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or aesthetics of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).	**LC.RL.5.7** Describe how visual and multimedia elements contribute to the meaning or tone of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
RL.5.8 (Not applicable to literature) [7]	
RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.	**LC.RL.5.9** Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
RL.5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.	**LC.RL.5.10a** Read or be read to a variety of literary texts or adapted texts, including graphic novels, poetry, and fiction. **LC.RL.5.10b** Use a variety of strategies to derive meaning from a variety of print and non-print literary texts.

[7] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.	**LC.RI.5.1a** Quote accurately from a text when explaining what the text says explicitly. **LC.RI.5.1b** Quote accurately from a text to support inferences.
RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.	**LC.RI.5.2a** Determine the main idea, and identify key details to support the main idea. **LC.RI.5.2b** Summarize the text or a portion of the text read, read aloud, or presented in diverse media.
RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.	**LC.RI.5.3a** Explain/identify the relationship between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text. **LC.RI.5.3b** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. **LC.RI.5.3c** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information across texts.
RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.	**LC.RI.5.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
RI.5.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two texts.	**LC.RI.5.5a** Use signal words as a means of locating information (e.g., knowing that *because* or *as a result of* may help link a cause to a result). **LC.RI.5.5b** Use signal words to identify common types of text structures.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
	LC.RI.5.5c Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.	**LC.RI.5.6** Note important similarities and differences in the point of view of multiple accounts of the same event or topic.
RI.5.7 Utilize information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	**LC.RI.5.7a** Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question or to solve a problem. **LC.RI.5.7b** Refer to multiple print or digital sources as support for inferences (e.g., how did you know?).
RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).	**LC.RI.5.8a** Explain how an author uses reasons and evidence to support particular points in a text. **LC.RI.5.8b** Identify reasons and evidence that support an author's point(s) in a text. **LC.RI.5.8c** Identify the author's stated thesis/claim/opinion. **LC.RI.5.8d** Identify evidence the author uses to support stated thesis/claim/opinion.
RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	**LC.RI.5.9a** Identify key details from multiple sources on the same topic (e.g., what are the important things that you learned?). **LC.RI.5.9b** Integrate information on a topic from multiple sources to answer a question or support a focus or opinion.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
RI.5.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.	**LC.RI.5.10a** Read or be read to a variety of informational texts or adapted texts. **LC.RI.5.10b** Use a variety of strategies to derive meaning from a variety of print and non-print informational texts.
RF.5.1 Mastered in grade 1.	
RF.5.2 Mastered in grade 1.	
RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.	**LC.RF.5.3** Use morphemes (e.g., roots and affixes) to decode unfamiliar multisyllabic words in and out of context.
RF.5.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**LC.RF.5.4** Use context to confirm or self-correct word recognition.
W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.	**LC.W.5.1a** Produce an opinion piece which has an introduction that states an opinion and has an organizational structure in which ideas are logically grouped to support the writer's opinion.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*). d. Provide a concluding statement or section related to the opinion presented.	**LC.W.5.1b** Provide relevant facts to support the reasons and stated opinion. **LC.W.5.1c** Link opinion and reasons using words and phrases. **LC.W.5.1d** Provide a concluding statement or section related to the opinion presented.
W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., *in contrast*, *especially*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	**LC.W.5.2a** Produce an informative/explanatory permanent product which has an introduction that includes context/background information on a topic and establishes a central idea or focus about the topic. **LC.W.5.2b** Group related information logically. **LC.W.5.2c** Develop the topic (i.e., add additional information related to the topic) with facts, definitions, concrete details, quotations, or other information and examples. **LC.W.5.2d** Include formatting (e.g., headings), illustrations, and multimedia when appropriate to convey information about the topic. **LC.W.5.2e** Use transitional words and phrases to connect ideas. **LC.W.5.2f** Use precise language and domain-specific vocabulary to inform about or explain the topic. **LC.W.5.2g** Provide a concluding statement or section related to the information presented.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situation. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	**LC.W.5.3a** Produce a narrative permanent product which orients the reader by establishing a situation and introducing a narrator and/or characters. **LC.W.5.3b** Organize an event so that it unfolds naturally. **LC.W.5.3c** When appropriate use narrative techniques, such as dialogue and description, to develop experiences and events or show the responses of characters to situations. **LC.W.5.3d** Use transitional words and phrases to manage the sequence of events. **LC.W.5.3e** Use concrete words and phrases and sensory details to convey experiences and events precisely. **LC.W.5.3f** Provide a conclusion (e.g., concluding sentence, paragraph, or extended ending) that follows from the narrated experiences or events.
W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.	**LC.W.5.4** Produce a clear, coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to inform or entertain), and audience (e.g., reader).
W.5.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a different approach.	**LC.W.5.5a** With guidance and support from peers and adults, develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft). **LC.W.5.5b** With guidance and support from peers and adults, strengthen permanent products by revising and editing (e.g., review a permanent product, strengthen an opinion piece by adding another reason, fix incorrect spelling).

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
W.5.6 With guidance and support from adults, produce and publish grade-appropriate writing using technology either independently or in collaboration with others.	**LC.W.5.6** Use technology to produce and publish permanent products (e.g., use the Internet to gather information; use word processing to generate and collaborate on writing).
W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	**LC.W.5.7** Follow steps to complete a short research project (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.	**LC.W.5.8a** Recall relevant information from experiences to use in permanent products. **LC.W.5.8b** Gather information (e.g., highlight in text, quote or paraphrase from a source) from print (e.g., text read aloud, printed image) and/or digital sources (e.g., video, audio, images/graphics) relevant to a topic. **LC.W.5.8c** Sort evidence collected from print and/or digital sources into provided categories. **LC.W.5.8d** Provide a list of sources that contributed to the creation of a permanent product.
W.5.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research. a. Apply *grade 5 Reading standards* to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply *grade 5 Reading standards* to informational texts (e.g., "Explain how an author uses reasons and evidence	**LC.W.5.9** Provide evidence from texts when producing permanent products.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
to support particular points in a text, identifying which reasons and evidence support which point[s]").	
W.5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	No Louisiana Connectors developed for this standard
SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	**LC.SL.5.1a** Make appropriate comments that contribute to a collaborative discussion. **LC.SL.5.1b** Review the key ideas expressed within a collaborative discussion.
SL.5.2 Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	**LC.SL.5.2a** Determine the narrative point of view of a text read, read aloud, or viewed.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
	LC.SL.5.2b Summarize the text or a portion of the text read, read aloud, or presented in diverse media.
SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.	**LC.SL.5.3a** Identify a speaker's points or claims. **LC.SL.5.3b** Summarize the points a speaker makes. **LC.SL.5.3c** Identify reasons and evidence that a speaker provides to support points or claims. **LC.SL.5.3d** Explain how at least one claim in a discussion is supported by reasons and evidence.
SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	**LC.SL.5.4a** Report on a topic, story or claim using a logical sequence of ideas, appropriate facts, and relevant and descriptive details. **LC.SL.5.4b** Elaborate on each fact or opinion given in support of a claim with relevant details.
SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.	**LC.SL.5.5a** Include multimedia components (e.g., graphics, sound) and visual displays in presentation when appropriate to enhance the development of topic. **LC.SL.5.5b** Use captioned pictures, labeled diagrams, tables, or other visual displays in presentations when appropriate to support the topic or theme.
SL.5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task, audience, and situation.	No Louisiana Connectors developed for this standard
L.5.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.	**LC.L.5.1a** Use appropriate verb tense to convey times, sequence, state, and condition. **LC.L.5.1b** Recognize and correct inappropriate shifts in verb tense.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. b. Form and use the perfect (e.g., *I had walked; I have walked; I will have walked*) verb tenses. c. Use verb tense to convey various times, sequences, states, and conditions. d. Recognize and correct inappropriate shifts in verb tense. e. Use correlative conjunctions (e.g., *either/or, neither/nor*).	**LC.L.5.1c** Identify and use conjunctions, prepositions, and interjections when communicating. **LC.L.5.1d** Produce simple, compound, and complex sentences in writing.
L.5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation to separate items in a series. b. Use a comma to separate an introductory element from the rest of the sentence. c. Use a comma to set off the words *yes* and *no* (e.g., *Yes, thank you*), to set off a tag question from the rest of the sentence (e.g., *It's true, isn't it?*), and to indicate direct address (e.g., *Is that you, Steve?*). d. Use underlining, quotation marks, or italics to indicate titles of works. e. Spell grade-appropriate words correctly, consulting references as needed.	**LC.L.5.2a** Use punctuation to separate items in a series. **LC.L.5.2b** Use commas accurately when communicating. **LC.L.5.2c** Spell words correctly when communicating, consulting references as needed.
L.5.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.	**LC.L.5.3** Expand, combine, and reduce sentences for meaning, reader interest, and style when communicating.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.	
L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 5 reading and content,* choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph, photosynthesis*). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	**LC.L.5.4a** Use context to determine the meaning of unknown or multiple meaning words. **LC.L.5.4b** Use common grade-appropriate roots and affixes as clues to the meaning of a word. **LC.L.5.4c** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word. **LC.L.5.4d** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the meaning of a word. **LC.L.5.4e** Identify the denotation for a known word.
L.5.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.	**LC.L.5.5a** Determine the meaning of words and phrases as they are used in a text including figurative language such as metaphors and similes. **LC.L.5.5b** Use figurative language in context, including similes and metaphors. **LC.L.5.5c** Identify the meaning of common idioms or proverbs. **LC.L.5.5d** Use the relationship between particular words (e.g., synonyms, antonyms, homographs) in writing to promote understanding of each of the words.
L.5.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including	**LC.L.5.6a** Use grade-appropriate general academic and domain-specific words and phrases accurately.

Grade 5 English Language Arts	
Louisiana Student Standards	**Louisiana Connectors (LC)**
those that signal contrast, addition, and other logical relationships (e.g., *however, although, nevertheless, similarly, moreover, in addition*).	

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.6.1 Cite relevant textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RL.6.1a** Refer to details and examples in a text when explaining what the text says explicitly. **LC.RL.6.1b** Use specific details from the text (e.g., words, interactions, thoughts, motivations) to support inferences or conclusions about characters including how they change during the course of the story. **LC.RL.6.1c** Use the specific details from the text to support inferences and explanations about plot development.
RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	**LC.RL.6.2a** Select key details about a character and relate those details to a theme within the text. **LC.RL.6.2b** Determine the theme(s) of a story, drama, or poem including how it is conveyed through particular details. **LC.RL.6.2c** Summarize a text from beginning to end in a few sentences without including personal opinions.
RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	**LC.RL.6.3a** Describe how the plot unfolds in a story. **LC.RL.6.3b** Analyze a character's interactions throughout a story as they relate to conflict and resolution.
RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.	**LC.RL.6.4** Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings.
RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.	**LC.RL.6.5** Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.
RL.6.6 Explain how an author develops the point of view of the narrator or speaker in a text.	**LC.RL.6.6a** Determine the narrative point of view. **LC.RL.6.6b** Identify and describe how the narrative point of view influences the reader's interpretation.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
	LC.RL.6.6c Explain how an author develops the point of view of the narrator or speaker in a text.
RL.6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.	**LC.RL.6.7** Compare the experience of reading a story or drama to listening to or viewing an audio, video, or live version of the text.
RL.6.8 (Not applicable to literature) [8]	
RL.6.9 Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.	**LC.RL.6.9** Compare texts from different genres that have a similar theme or address the same topic.
RL.6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RL.6.10a** Read or be read to a variety of literary texts or adapted texts, including historical novels, fantasy stories and novels, poetry, and fiction. **LC.RL.6.10b** Use a variety of strategies to derive meaning from a variety of print and non-print literary texts.
RI.6.1 Cite relevant textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RI.6.1** Use textual evidence to support inferences.
RI.6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	**LC.RI.6.2** Provide a summary of the text distinct from personal opinions or judgments.

[8] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).	**LC.RI.6.3a** Identify key individuals, events, or ideas in a text. **LC.RI.6.3b** Determine how key individuals, events, or ideas are introduced in a text. **LC.RI.6.3c** Determine how key individuals, events, or ideas are illustrated in a text. **LC.RI.6.3d** Determine how key individuals, events, or ideas are elaborated or expanded on in a text.
RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.	**LC.RI.6.4** Determine the meaning of words and phrases as they are used in a text including figurative (e.g., metaphors, similes, and idioms) and connotative meanings.
RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.	**LC.RI.6.5** Use signal words as a means of locating information (e.g., knowing that *because* or *as a result of* may help link a cause to a result.
RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	**LC.RI.6.6** Determine an author's point of view or purpose in a text and explain how it is conveyed.
RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	**LC.RI.6.7a** Identify what is learned from different media or formats compared to what is learned via written words or spoken words. **LC.RI.6.7b** Summarize information gained from a variety of sources including media or texts. **LC.RI.6.7c** Identify relevant details from several texts on the same topic (e.g., what are the important things that you learned?).
RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	**LC.RI.6.8a** Identify an argument or claim that the author makes. **LC.RI.6.8b** Evaluate the claim or argument; determine if it is supported by evidence.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
	LC.RI.6.8c Distinguish claims or arguments from those that are supported by evidence from those that are not.
RI.6.9 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).	**LC.RI.6.9** Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).
RI.6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RI.6.10a** Read or be read to a variety of informational texts or adapted texts. **LC.RI.6.10b** Use a variety of strategies to derive meaning from a variety of print and non-print informational texts.
W.6.1 Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented.	**LC.W.6.1a** Produce a persuasive permanent product which has an introduction that introduces a claim. **LC.W.6.1b** Create an organizational structure in which ideas are logically grouped to support the claim. **LC.W.6.1c** Support the claim with clear reasons and relevant evidence from credible sources. **LC.W.6.1d** Use words, phrases, and clauses to link the claim and reasons. **LC.W.6.1e** Provide a concluding statement or section that follows the argument presented. **LC.W.6.1f** Distinguish claims presented orally or in writing that are supported by reasons and claims that are not.
W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting	**LC.W.6.2a** Produce an informative/explanatory permanent product which has an introduction that includes context/background information on a topic and establishes a central idea or focus about the topic. **LC.W.6.2b** Organize ideas, concepts, and information (e.g., using definition, classification, comparison/contrast, cause/effect).

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
(e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	**LC.W.6.2c** Develop the topic (i.e., add additional information related to the topic) with relevant facts, definitions, concrete details, quotations, or other information and examples. **LC.W.6.2d** Include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to promote reading understanding. **LC.W.6.2e** Use transitional words, phrases, and clauses that connect ideas. **LC.W.6.2f** Use precise language and domain-specific vocabulary to inform about or explain the topic. **LC.W.6.2g** Maintain a consistent style and voice. **LC.W.6.2h** Provide a concluding statement or section that follows from the information presented.
W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	**LC.W.6.3a** Produce a narrative permanent product which engages and orients the reader by establishing a context and introducing a narrator and/or characters. **LC.W.6.3b** Organize events so they unfold naturally. **LC.W.6.3c** When appropriate, use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. **LC.W.6.3d** Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. **LC.W.6.3e** Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. **LC.W.6.3f** Provide a conclusion that follows from the narrated experiences or events. **LC.W.6.3g** Use figurative language appropriately, including similes and metaphors.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**LC.W.6.4** Produce a clear, coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to inform or entertain), and audience (e.g., reader).
W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a different approach.	**LC.W.6.5a** With guidance and support from peers and adults, develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft). **LC.W.6.5b** With guidance and support from peers and adults, strengthen writing by revising and editing (e.g., review a permanent product, strengthen an informative/explanatory permanent product by adding transitional phrases, fix incorrect verb tense).
W.6.6 Produce and publish grade-appropriate writing using technology either independently or in collaboration with others.	**LC.W.6.6** Use technology to produce and publish permanent products (e.g., use the Internet to gather information; use word processing to generate and collaborate on writing).
W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	**LC.W.6.7** Follow steps to complete a short research project (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	**LC.W.6.8a** Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from print (e.g., text read aloud, printed image) and/or digital sources (e.g., video, audio, images/graphics) relevant to a topic. **LC.W.6.8b** Quote or paraphrase the data and conclusions of others while avoiding plagiarism. **LC.W.6.8c** Provide a bibliography for sources that contributed to the creation of a permanent product.
W.6.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.	**LC.W.6.9** Provide evidence from texts when producing permanent products.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
a. Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics"). b. Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").	
W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	No Louisiana Connectors developed for this standard
SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	**LC.SL.6.1a** Make appropriate comments that contribute to a collaborative discussion. **LC.SL.6.1b** Review the key ideas expressed within a collaborative discussion linking multiple perspectives together.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	**LC.SL.6.2a** Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally). **LC.SL.6.2b** Explain how information gained via media and formats contributes to the understanding of a topic, text, or issue under study.
SL.6.3 Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	**LC.SL.6.3a** Summarize the points a speaker makes. **LC.SL.6.3b** Summarize the points an author makes. **LC.SL.6.3c** Distinguish claims or arguments from those that are supported by evidence from those that are not. **LC.SL.6.3d** Distinguish claims presented orally or in writing that are supported by reasons and claims that are not.
SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	**LC.SL.6.4** Report on a topic, story or claim with a logical sequence of ideas, appropriate facts and relevant, descriptive details.
SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	**LC.SL.6.5a** Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information. **LC.SL.6.5b** Use captioned pictures, labeled diagrams, tables, or other visual displays in presentations when appropriate to support the topic or theme.
SL.6.6 Adapt speech to a variety of contexts, audiences, and tasks, demonstrating command of formal English when indicated or appropriate.	No Louisiana Connectors developed for this standard
L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Ensure that pronouns are in the proper case (subjective, objective, possessive). b. Use intensive pronouns (e.g., *myself, ourselves*).	**LC.L.6.1** Use strategies (e.g., clarify language and grammar, vary sentence patterns, maintain consistent tone and style) to improve written expression in conventional language.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
c. Recognize and correct inappropriate shifts in pronoun number and person. d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.	
L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements. b. Spell correctly.	**LC.L.6.2a** Use commas, parentheses, and/or dashes to set off nonrestrictive/parenthetical elements. **LC.L.6.2b** Spell words correctly when communicating.
L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Vary sentence patterns for meaning, reader/listener interest, and style. b. Maintain consistency in style and tone.	**LC.L.6.3** Vary sentence patterns for meaning, reader interest, and style when communicating.
L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 6 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *audience, auditory, audible*). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation	**LC.L.6.4a** Use context to determine the meaning of unknown or multiple meaning words. **LC.L.6.4b** Use common grade-appropriate roots and affixes as clues to the meaning of a word. **LC.L.6.4c** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word. **LC.L.6.4d** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. **LC.L.6.4e** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word.

Grade 6 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**LC.L.6.4f** Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).
L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., personification) in context. b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy, scrimping, economical, unwasteful, thrifty*).	**LC.L.6.5a** Explain the meaning of figures of speech (e.g., personification, idioms, proverbs) in context. **LC.L.6.5b** Interpret the use of personification within a text. **LC.L.6.5c** Use figurative language appropriately, including similes and metaphors. **LC.L.6.5d** Use the relationship between particular words (e.g., synonyms, antonyms, homographs) in writing to promote understanding of each of the words. **LC.L.6.5e** Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. **LC.L.6.5f** Identify the connotative meaning (i.e., the idea associated with the word) of a word or phrase
L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	**LC.L.6.6a** Use grade-appropriate general academic and domain-specific words and phrases accurately.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.7.1 Cite several pieces of relevant evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RL.7.1a** Refer to details and examples in a text when explaining what the text says explicitly. **LC.RL.7.1b** Use two or more pieces of textual evidence to support conclusions, or summaries of text.
RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	**LC.RL.7.2a** Determine the theme or central idea of a text. **LC.RL.7.2b** Analyze the development of the theme or central idea over the course of the text.
RL.7.3 Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).	**LC.RL.7.3a** Analyze the impact of story elements on the text (e.g., impact of setting on a character's choices, cause/effects within the text). **LC.RL.7.3b** Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).
RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	**LC.RL.7.4a** Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings. **LC.RL.7.4b** Identify alliteration within text. **LC.RL.7.4c** Analyze how the use of rhymes or repetitions of sounds affect the tone of the poem, story, or drama.
RL.7.5 Analyze how the overall form or structure of a text (e.g., drama, poetry, narrative, short story) contributes to its meaning.	**LC.RL.7.5** Examine how the structure of a poem or drama adds to its meaning.
RL.7.6 Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	**LC.RL.7.6** Compare and contrast the points of view of different characters in the same text.
RL.7.7 Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	**LC.RL.7.7a** Compare and contrast a story, drama, or poem when presented in two different mediums.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
	LC.RL.7.7b Compare and contrast different mediums that may be used to present literary materials to explore the techniques used in the various mediums.
RL.7.8 (Not applicable to literature) [9]	
RL.7.9 Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.	**LC.RL.7.9** Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.
RL.7.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RL.7.10a** Read or be read to a variety of literary texts or adapted texts including historical novels, dramas or plays, poetry (including soliloquies and sonnets), and fiction. **LC.RL.7.10b** Use a variety of strategies to derive meaning from a variety of print and non-print literary texts.
RI.7.1 Cite several pieces of relevant textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RI.7.1** Use two or more pieces of evidence to support inferences, conclusions, or summaries of text.
RI.7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.	**LC.RI.7.2a** Determine the central idea of a text. **LC.RI.7.2b** Analyze the development of the central idea over the course of the text**.** **LC.RI.7.2c** Create an objective summary of a text.
RI.7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).	**LC.RI.7.3** Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

[9] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.	**LC.RI.7.4a** Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings. **LC.RI.7.4b** Analyze how the use of figurative, connotative or technical terms affect the meaning or tone of text.
RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.	**LC.RI.7.5a** Use signal words as a means of locating information. **LC.RI.7.5b** Outline a given text to show how ideas build upon one another. **LC.RI.7.5c** Determine the structure of a text. **LC.RI.7.5d** Determine how the information in each section contribute to the whole or to the development of ideas.
RI.7.6 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.	**LC.RI.7.6** Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.
RI.7.7 Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).	**LC.RI.7.7** Compare/contrast how two or more authors write or present about the same topic.
RI.7.8 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	**LC.RI.7.8a** Identify an argument or claim that the author makes. **LC.RI.7.8b** Evaluate the claim or argument to determine if they are supported by evidence. **LC.RI.7.8c** Distinguish claims or arguments from those that are supported by evidence from those that are not.
RI.7.9 Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.	**LC.RI.7.9a** Use supporting evidence to summarize central ideas, draw inferences, or analyze connections within or across texts. **LC.RI.7.9b** Compare/contrast how two or more authors write about the same topic.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
	LC.RI.7.9c Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.
RI.7.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**LC.RI.7.10a** Read or be read to a variety of informational texts or adapted texts. **LC.RI.7.10b** Use a variety of strategies to derive meaning from a variety of print and non-print informational texts.
W.7.1 Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. Establish and maintain a formal style. d. Provide a concluding statement or section that follows from and supports the argument presented.	**LC.W.7.1a** Produce a persuasive permanent product which has an introduction that introduces a claim and acknowledges alternate or opposing claims. **LC.W.7.1b** Create an organizational structure in which ideas are logically grouped to support the claim. **LC.W.7.1c** Support the claim with logical reasoning and relevant evidence from credible sources. **LC.W.7.1d** Use words, phrases, and clauses to link the claim and reasons and clarify relationships among ideas. **LC.W.7.1e** Maintain a consistent style and voice. **LC.W.7.1f** Provide a concluding statement or section that follows from and supports the argument presented.
W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	**LC.W.7.2a** Produce an informative/explanatory permanent product which has an introduction that clearly previews information to follow about a topic. **LC.W.7.2b** Organize ideas, concepts, and information (e.g., using definition, classification, comparison/contrast, and cause/effect). **LC.W.7.2c** Develop the topic (i.e., add additional information related to the topic) with relevant facts, definitions, concrete details, quotations, or other information and examples.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	**LC.W.7.2d** Use transitional words, phrases, and clauses that connect ideas and create cohesion. **LC.W.7.2e** Use precise language and domain-specific vocabulary to inform about or explain the topic. **LC.W.7.2f** Maintain a consistent style and voice. **LC.W.7.2g** Provide a concluding statement or section that follows from and supports the information presented.
W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.	**LC.W.7.3a** Produce a narrative permanent product which engages and orients the reader by establishing a context and point of view and introducing the narrator and/or characters. **LC.W.7.3b** Organize events so they unfold naturally. **LC.W.7.3c** When appropriate, use narrative techniques (e.g., dialogue, pacing, and description), to develop experiences, events, and/or characters. **LC.W.7.3d** Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. **LC.W.7.3e** Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. **LC.W.7.3f** Provide a conclusion that follows from the narrated experiences or events. **LC.W.7.3g** Use words, phrases, or gathered information to accurately reflect literary context.
W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**LC.W.7.4** Produce a clear, coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to persuade or inform), and audience (e.g., reader).

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
W.7.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a different approach, focusing on how well purpose and audience have been addressed.	**LC.W.7.5a** With guidance and support from peers and adults, develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft). **LC.W.7.5b** With guidance and support from peers and adults, strengthen writing by revising and editing (e.g., review a permanent product, strengthen an informative/explanatory permanent product by adding transitional phrases, vary sentence types).
W.7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.	**LC.W.7.6** Use technology to produce and publish writing (e.g., use internet to gather information; use word processing to generate and collaborate on writing).
W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	**LC.W.7.7** Follow steps to complete a short research project (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.7.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	**LC.W.7.8a** List internet search terms for a topic of study. **LC.W.7.8b** Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from print (e.g., text read aloud, printed image) and/or digital sources (e.g., video, audio, images/graphics) relevant to a topic. **LC.W.7.8c** Quote or paraphrase the data and conclusions of others while avoiding plagiarism. **LC.W.7.8d** Use a standard format to write citations. **LC.W.7.8e** Provide a bibliography for sources that contributed to the creation of a permanent product.
W.7.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.	**LC.W.7.9** Provide evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
a. Apply *grade 7 Reading standards* to literature (e.g., "Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history"). b. Apply *grade 7 Reading standards* to literary nonfiction (e.g. "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims").	
W.7.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	No Louisiana Connectors developed for this standard
SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 7 topics, texts, and issues,* building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	**LC.SL.7.1a** Describe how the claims within a speaker's argument match own argument. **LC.SL.7.1b** Discuss how own view or opinion changes using new information provided by others. **LC.SL.7.1c** Use information and feedback to refine understanding or products. **LC.SL.7.1d** Use information and feedback to refine own thinking.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	**LC.SL.7.2a** Critically evaluate main ideas and details presented in diverse media (e.g., visually, personal communication, periodicals, social media) and formats for accuracy. **LC.SL.7.2b** Explain if and how ideas presented in diverse media (e.g., visually, personal communication, periodicals, social media) clarify a topic, text, or issue under study. **LC.SL.7.2c** Identify how information on a topic or text presented in diverse media and formats (e.g., visually, quantitatively, orally) contributes to understanding.
SL.7.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	**LC.SL.7.3a** Evaluate the soundness of reasoning and the relevance and sufficiency of evidence provided in an argument. **LC.SL.7.3b** Evaluate the soundness or accuracy of reasons presented to support a claim.
SL.7.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	**LC.SL.7.4a** Present claims and findings, emphasizing salient points in a coherent manner with pertinent descriptions, facts, details, and examples. **LC.SL.7.4b** Report on a topic, with a logical sequence of ideas, appropriate facts and relevant, descriptive details which support the main ideas.
SL.7.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	**LC.SL.7.5** Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
SL.7.6 Adapt speech to a variety of contexts, audiences, and tasks, demonstrating command of formal English when indicated or appropriate.	No Louisiana Connectors developed for this standard
L.7.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.	**LC.L.7.1a** Use phrases and clauses accurately within a sentence. **LC.L.7.1b** When appropriate, use simple, compound, complex, and compound-complex sentences when communicating.

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
a. Explain the function of phrases and clauses in general and their function in specific sentences. b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.	
L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie* but not *He wore an old[,] green shirt*). b. Spell correctly.	**LC.L.7.2a** Use commas to separate coordinate adjectives. **LC.L.7.2b** Spell words correctly.
L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.	**LC.L.7.3a** Use words, phrases, or gathered information to accurately reflect meaning. **LC.L.7.3b** Choose language that expresses ideas precisely and concisely by eliminating wordiness and redundancy.
L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 7 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *belligerent, bellicose, rebel*).	**LC.L.7.4a** Use context as a clue to determine the meaning of a grade-appropriate word or phrase. **LC.L.7.4b** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word. **LC.L.7.4c** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. **LC.L.7.4d** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word. **LC.L.7.4e** Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).

Grade 7 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	
L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*).	**LC.L.7.5a** Identify allusion within a text or media. **LC.L.7.5b** Interpret figures of speech (e.g., personification, allusions) in context. **LC.L.7.5c** Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. **LC.L.7.5d** Identify the connotative meaning (the idea associated with the word) of a word or phrase. **LC.L.7.5e** Distinguish among the connotations (i.e., associations) of words with similar denotations (i.e., definitions) (e.g., *slim, skinny, scrawny, thin*). **LC.L.7.5f** Use words, phrases, or gathered information to accurately reflect literary context.
L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	**LC.L.7.6a** Use grade-appropriate general academic and domain-specific words and phrases accurately.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.8.1 Cite the relevant textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RL.8.1a** Refer to details and examples in a text when explaining what the text says explicitly. **LC.RL.8.1b** Use two or more pieces of evidence to support inferences, conclusions, or summaries or text. **LC.RL.8.1c** Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries or text.
RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	**LC.RL.8.2a** Determine the theme or central idea of a text. **LC.RL.8.2b** Analyze the development of the theme or central idea over the course of the text including its relationship to the characters, setting and plot. **LC.RL.8.2c** Create an objective summary of a text.
RL.8.3 Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.	**LC.RL.8.3a** Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character or provoke a decision. **LC.RL.8.3b** Identify the use of literary techniques within a text. **LC.RL.8.3c** Explain how the use of literary techniques within a text advances the plot or reveal aspects of a character.
RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	**LC.RL.8.4a** Identify and interpret an analogy within a text. **LC.RL.8.4b** Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings.
RL.8.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.	**LC.RL.8.5a** Compare and contrast the structure of two or more texts. **LC.RL.8.5b** Explain how language use contributes to the meaning of a poem or drama.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.8.6 Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.	**LC.RL.8.6a** Compare and contrast the points of view of different characters in the same text. **LC.RL.8.6b** Analyze how differences in points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) creates such effects as suspense or humor.
RL.8.7 Analyze the extent to which non-printed media (e.g., film, drama, live production, art) connects to or departs from the text or script, evaluating the choices.	**LC.RL.8.7** Compare and contrast content presented in text, media, and live performance.
RL.8.8 (Not applicable to literature)[10]	
RL.8.9 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or foundational religious works; describe how the material is rendered new.	**LC.RL.8.9** Compare modern works of literature to the texts from which they draw ideas.
RL.8.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.	**LC.RL.8.10a** Read or be read to a variety of literary texts or adapted texts including historical novels, dramas or plays, poetry (including soliloquies and sonnets), and fiction. **LC.RL.8.10b** Use a variety of strategies to derive meaning from a variety of print and non-print literary texts.
RI.8.1 Cite the relevant textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RI.8.1a** Use two or more pieces of evidence to support inferences, conclusions, or summaries of text. **LC.RI.8.1b** Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries or text.

[10] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RI.8.2 Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.	**LC.RI.8.2a** Determine two or more central ideas in a text. **LC.RI.8.2b** Analyze the development of the central ideas over the course of the text. **LC.RI.8.2c** Provide/create an objective summary of a text.
RI.8.3 Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).	**LC.RI.8.3** Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).
RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	**LC.RI.8.4a** Identify and interpret an analogy within a text. **LC.RI.8.4b** Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings. **LC.RI.8.4c** Analyze how the use of figurative, connotative or technical terms affects the meaning or tone of text.
RI.8.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.	**LC.RI.8.5a** Use signal words as a means of locating information. **LC.RI.8.5b** Outline the structure (i.e., sentence that identifies key concept(s), supporting details) within a paragraph. **LC.RI.8.5c** Determine the structure of a text. **LC.RI.8.5d** Determine how the information in each section contributes to the whole or to the development of ideas.
RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	**LC.RI.8.6** Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
RI.8.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.	No Louisiana Connectors developed for this standard

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RI.8.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	**LC.RI.8.8a** Identify an argument or claim that the author makes. **LC.RI.8.8b** Evaluate the claim or argument to determine if it is supported by evidence.
RI.8.9 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.	**LC.RI.8.9** Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.
RI.8.10 By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.	**LC.RI.8.10a** Read or be read to a variety of informational texts or adapted texts. **LC.RI.8.10b** Use a variety of strategies to derive meaning from a variety of print and non-print informational texts.
W.8.1 Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	**LC.W.8.1a** Produce a persuasive permanent product which has an introduction that introduces a claim and distinguishes it from alternate or opposing claims. **LC.W.8.1b** Create an organizational structure in which ideas are logically grouped to support the claim. **LC.W.8.1c** Support the claim with logical reasoning and relevant evidence from credible sources. **LC.W.8.1d** Use words, phrases and clauses to link the claim and reasons and clarify relationship among ideas. **LC.W.8.1e** Maintain a consistent style and voice. **LC.W.8.1f** Provide a concluding statement or section that follows from and supports the argument presented.
W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	**LC.W.8.2a** Produce an informative/explanatory permanent product which has an introduction that clearly previews information to follow about a topic.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	**LC.W.8.2b** Create an organizational structure (e.g., cause/effect, compare/contrast, descriptions and examples) that groups information logically to support the stated topic. **LC.W.8.2c** Develop the topic (i.e., add additional information related to the topic) with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. **LC.W.8.2d** Use transitional words, phrases, and clauses that connect ideas and create cohesion. **LC.W.8.2e** Use precise language and domain-specific vocabulary to inform about or explain the topic. **LC.W.8.2f** Maintain a consistent style and voice. **LC.W.8.2g** Provide a concluding statement or section that follows from and supports the information or explanation presented.
W.8.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.	**LC.W.8.3a** Produce a narrative permanent product which engages and orients the reader by establishing a context and point of view and introducing a narrator and/or characters. **LC.W.8.3b** Organize events so they unfold naturally. **LC.W.8.3c** When appropriate, use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. **LC.W.8.3d** Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. **LC.W.8.3e** Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. **LC.W.8.3f** Provide a conclusion that follows from the narrated experiences or events. **LC.W.8.3g** Use literacy devices (e.g., similes, metaphors, hyperbole, personification, imagery) when communicating.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
e. Provide a conclusion that follows from and reflects on the narrated experiences or events.	
W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**LC.W.8.4** Produce a clear, coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to persuade or inform), and audience (e.g., reader).
W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a different approach, focusing on how well purpose and audience have been addressed.	**LC.W.8.5a** With guidance and support from peers and adults, develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft). **LC.W.8.5b** With guidance and support from peers and adults, strengthen writing by revising and editing (e.g., review a permanent product, strengthen a persuasive permanent product by adding a reason, vary sentence types).
W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	**LC.W.8.6** Use technology to produce and publish permanent products (e.g., use word processing to generate and collaborate on writing).
W.8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	**LC.W.8.7** Follow steps to complete a short research project (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	**LC.W.8.8a** Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from print (e.g., text read aloud, printed image) and/or digital sources (e.g., video, audio, images/graphics) relevant to a topic. **LC.W.8.8b** Quote or paraphrase the data and conclusions of others while avoiding plagiarism. **LC.W.8.8c** Use a standard format to produce citations.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
	LC.W.8.8d Provide a bibliography for sources that contributed to the creation of a permanent product.
W.8.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research. a. Apply *grade 8 Reading standards* to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, historical fiction, or foundational religious, including describing how the material is rendered new"). b. Apply *grade 8 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").	**LC.W.8.9** Provide evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.
W.8.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	No Louisiana Connectors developed for this standard
SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 8 topics, texts, and issues,* building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.	**LC.SL.8.1a** Use information and feedback to refine understanding. **LC.SL.8.1b** Use information and feedback to clarify meaning for readers. **LC.SL.8.1c** Discuss how own view or opinion changes using new information provided by others.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	
SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.	**LC.SL.8.2a** Analyze the purpose of information presented in diverse media (e.g., visually, personal communication, periodicals, social media). **LC.SL.8.2b** Identify the motives behind information presented in diverse media and formats (e.g., visually, personal communication, periodicals, social media). **LC.SL.8.2c** Evaluate the motives and purpose behind information presented in diverse media and format for persuasive reasons.
SL.8.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.	**LC.SL.8.3a** Evaluate the soundness of reasoning and the relevance and sufficiency of evidence provided in an argument. **LC.SL.8.3b** Identify when irrelevant evidence is introduced within an argument. **LC.SL.8.3c** Evaluate the soundness or accuracy (e.g., multiple sources to validate information) of reasons presented to support a claim.
SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	**LC.SL.8.4a** Present claims and findings, emphasizing salient points in a coherent manner with relevant evidence. **LC.SL.8.4b** Report on a topic, with a logical sequence of ideas, appropriate facts and relevant, descriptive details which support the main ideas.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.	**LC.SL.8.5** Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
SL.8.6 Adapt speech to a variety of contexts, audiences, and tasks, demonstrating command of formal English when indicated or appropriate.	No Louisiana Connectors developed for this standard
L.8.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. b. Form and use verbs in the active and passive voice. c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood. d. Recognize and correct inappropriate shifts in verb voice and mood.	**LC.L.8.1a** Use active and passive verbs when communicating. **LC.L.8.1b** Use verbs in indicative, imperative, interrogative, conditional, and/or subjunctive mood when communicating.
L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. b. Use an ellipsis to indicate an omission. c. Spell correctly.	**LC.L.8.2a** Use punctuation (e.g., comma, ellipsis, dash) to indicate a pause or break. **LC.L.8.2b** Spell words correctly.
L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).	**LC.L.8.3a** Use active and passive voice in writing to achieve a particular effect. **LC.L.8.3b** Use verbs in the conditional and subjunctive mood to achieve a particular effect.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on *grade 8 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede, secede*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**LC.L.8.4a** Use context as a clue to the meaning of a grade-appropriate word or phrase. **LC.L.8.4b** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word. **LC.L.8.4c** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. **LC.L.8.4d** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word. **LC.L.8.4e** Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).
L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g. verbal irony, puns) in context. b. Use the relationship between particular words to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *bullheaded, willful, firm, persistent, resolute*).	**LC.L.8.5a** Identify irony within a text or media **LC.L.8.5b** Identify a pun within a text or media. **LC.L.8.5c** Interpret figures of speech (e.g., allusions, verbal irony, puns) in context. **LC.L.8.5d** Use literacy devices (e.g., similes, metaphors, hyperbole, personification, imagery) in narrative writing. **LC.L.8.5e** Use the relationship between particular words to better understand each of the words. **LC.L.8.5f** Distinguish among the connotations (i.e., associations) of words with similar denotations (i.e., definitions) (e.g., *bullheaded, willful, firm, persistent, resolute*).
L.8.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge	**LC.L.8.6a** Use grade-appropriate general academic and domain-specific words and phrases accurately.

Grade 8 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
when considering a word or phrase important to comprehension or expression.	

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.9-10.1 Cite relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RL.9-10.1a** Use two or more pieces of evidence to support inferences, conclusions, or summaries of the plot, purpose, or theme within a text. **LC.RL.9-10.1b** Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries of text.
RL.9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	**LC.RL.9-10.2a** Determine the theme or central idea of an adapted grade appropriate text. **LC.RL.9-10.2b** Determine how the theme develops. **LC.RL.9-10.2c** Determine how key details support the development of the theme of an adapted grade-level text.
RL.9-10.3 Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.	**LC.RL.9-10.3a** Identify character with multiple or conflicting motivations (i.e., a complex character). **LC.RL.9-10.3b** Delineate how a complex character develops over the course of a text, interacts with other characters, and advances the plot or develops the theme.
RL.9-10.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	**LC.RL.9-10.4** Determine the meaning of words and phrases as they are used in a text including figurative (e.g., metaphors, similes, and idioms) and connotative meanings.
RL.9-10.5 Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	**LC.RL.9-10.5** Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.
RL.9-10.6 Analyze a particular point of view or cultural experience reflected in works of literature, drawing on a wide reading of world literature.	**LC.RL.9-10.6** Compare and contrast works from different cultures with a common theme.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.9-10.7 Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's *Landscape with the Fall of Icarus*)	**LC.RL.9-10.7** Analyze the representation of a subject or a key scene in two different artistic mediums, including what is absent in each treatment.
RL.9-10.8 (Not applicable to literature) [11]	
RL.9-10.9 Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).	**LC.RL.9-10.9** Analyze how an author draws on source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).
RL.9-10.10 By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently.	**LC.RL.9-10.10a** Read or be read to a variety of literary texts or adapted texts including historical novels, classical dramas or plays, poetry, novels written by international authors, and fiction. **LC.RL.9-10.10b** Use strategies to derive meaning from a variety of print and non-print literary texts.
RI.9-10.1 Cite relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**LC.RI.9-10.1a** Use two or more pieces of evidence to support inferences, conclusions, or summaries. **LC.RI.9-10.1b** Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries in a text.

[11] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RI.9-10.2 Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	**LC.RI.9-10.2a** Determine the central idea of a text. **LC.RI.9-10.2b** Determine how the central idea develops. **LC.RI.9-10.2c** Determine how key details support the development of the central idea of a text. **LC.RI.9-10.2d** Create an objective summary of a text.
RI.9-10.3 Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	**LC.RI.9-10.3a** Analyze key points throughout a text to determine the organizational pattern or text structure. **LC.RI.9-10.3b** Identify connections between key points.
RI.9-10.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	**LC.RI.9-10.4a** Determine the meaning of words and phrases as they are used in a text including figurative (e.g., metaphors, similes, and idioms) and connotative meanings. **LC.RI.9-10.4b** Analyze the use of figurative, connotative or technical terms on the meaning or tone of text.
RI.9-10.5 Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).	**LC.RI.9-10.5a** Analyze in detail how an author's ideas or claims are developed. **LC.RI.9-10.5b** Identify key sentences or paragraphs that support claims.
RI.9-10.6 Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	**LC.RI.9-10.6a** Determine the author's point of view or purpose in a text. **LC.RI.9-10.6b** Determine/identify the specific language/words that the author uses to advance the point of view or purpose. **LC.RI.9-10.6c** Develop and explain ideas for why authors made specific word choices within text.
RI.9-10.7 Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.	**LC.RI.9-10.7** Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RI.9-10.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	**LC.RI.9-10.8a** Identify claims and arguments made by the author. **LC.RI.9-10.8b** Delineate/trace the author's argument and specific claims. **LC.RI.9-10.8c** Evaluate the argument/claims that the author makes to determine if the statements are true or false. **LC.RI.9-10.8d** Delineate the argument and specific claims in two or more texts on related topics. **LC.RI.9-10.8e** Assess the validity of the arguments across texts on related topics.
RI.9-10.9 Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts.	**LC.RI.9-10.9a** Identify central ideas and concepts in seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"). **LC.RI.9-10.9b** Analyze how seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail") address similar central ideas.
RI.9-10.10 By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently.	**LC.RI.9-10.10a** Read or be read to a variety of informational texts or adapted texts. **LC.RI.9-10.10b** Read challenging grade-level informational texts. **LC.RI.9-10.10c** Use a variety of strategies to derive meaning from a variety print and non-print informational texts.
W.9-10.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that	**LC.W.9-10.1a** Introduce claim(s) for an argument that reflects knowledge of the topic. **LC.W.9-10.1b** Identify claim(s) from alternate or opposing claims(s) in writing.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
establishes clear relationships among claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.	**LC.W.9-10.1c** Create an organizational structure which develops relationships among claim(s), reasons, and evidence (e.g., introduce claims, distinguish supporting and opposing claims and relevant evidence for each, provide conclusion). **LC.W.9-10.1d** Identify specific evidence for claim(s) and counterclaim(s). **LC.W.9-10.1e** Develop clear claim(s) with specific evidence for a topic or text. **LC.W.9-10.1f** Use words, phrases, and clauses to create cohesion within writing. **LC.W.9-10.1g** Use words, phrases, and clauses to clarify the relationship among claims, counterclaims, reasons, and evidence. **LC.W.9-10.1h** Maintain a consistent style and voice. **LC.W.9-10.1i** Provide a concluding statement or section that supports the argument presented by stating the significance of the claim.
W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	**LC.W.9-10.2a** Produce an informative/explanatory permanent product which has an introduction that clearly previews information to follow about a topic. **LC.W.9-10.2b** Create an organizational structure (e.g., cause/effect, compare/contrast, descriptions and examples) that groups information logically to support the stated topic. **LC.W.9-10.2c** Develop the topic (i.e., add additional information related to the topic) with relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate for the audience. **LC.W.9-10.2d** Use transitional words, phrases, and clauses that connect ideas and create cohesion. **LC.W.9-10.2e** Use precise language and domain-specific vocabulary to manage the complexity of the topic. **LC.W.9-10.2f** Maintain a consistent style and voice.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
d. Use precise language and domain-specific vocabulary to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	**LC.W.9-10.2g** Provide a concluding statement or section that follows from and supports the information or explanation presented.
W.9-10.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, mood, tone, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion (when appropriate to the genre) that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	**LC.W.9-10.3a** Produce a narrative permanent product which engages and orients the reader by setting out a problem, situation, or observation and establishes one or multiple point(s) of view. **LC.W.9-10.3b** Sequence events so that they build on one another to create a smooth progression of experiences or events. **LC.W.9-10.3c** Include plot and pacing techniques (e.g., flashback, foreshadowing, suspense) as appropriate. **LC.W.9-10.3d** Include dialogue that advances the plot or theme (e.g., reveals character motivations, feelings, thoughts, how a character has changed perspectives). **LC.W.9-10.3e** Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. **LC.W.9-10.3f** Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
W.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**LC.W.9-10.4** Produce a clear, coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to persuade or inform), or audience (e.g., reader).

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
W.9-10.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a different approach, focusing on addressing what is most significant for a specific purpose and audience.	**LC.W.9-10.5a** Develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft) focused on a specific purpose and audience. **LC.W.9-10.5b** Strengthen writing by revising and editing (e.g., review a permanent product, strengthen informative/explanatory permanent products by adding examples, use parallel structure correctly).
W.9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	**LC.W.9-10.6** Use technology to produce and publish permanent products (e.g., use the Internet to gather information; use word processing to generate and collaborate on permanent products).
W.9-10.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	**LC.W.9-10.7** Follow steps to complete a short or sustained research project to build knowledge on a topic or text, answer a question and/or solve a problem (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.9-10.8 Gather relevant information from multiple authoritative sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.	**LC.W.9-10.8a** Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from authoritative print and/or digital sources relevant to a topic or stated claim. **LC.W.9-10.8b** Integrate information presented by others into permanent products while avoiding plagiarism. **LC.W.9-10.8c** Use a standard format to write citations. **LC.W.9-10.8d** Provide a bibliography for sources that contributed to the creation of a permanent product.
W.9-10.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.	**LC.W.9-10.9** Provide evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
a. Apply *grades 9–10 Reading standards* to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). b. Apply *grades 9–10 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").	
W.9-10.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	No Louisiana Connectors written for this standard
SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 9–10 topics, texts, and issues,* building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger	**LC.SL.9-10.1a** Work with peers to set rules for collegial discussions and decision-making. **LC.SL.9-10.1b** Actively seek the ideas or opinions of others in a discussion on a given topic or text. **LC.SL.9-10.1c** Engage appropriately in discussion with others who have a diverse or divergent perspective. **LC.SL.9-10.1d** Clarify, verify, or challenge ideas and conclusions within a discussion on a given topic or text. **LC.SL.9-10.1e** Summarize points of agreement and disagreement within a discussion on a given topic or text. **LC.SL.9-10.1f** Use evidence and reasoning presented in discussion on topic or text to make new connections with own view or understanding.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	
SL.9-10.2 Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.	**LC.SL.9-10.2** Analyze credibility of sources and accuracy of information presented in social media regarding a given topic or text.
SL.9-10.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	**LC.SL.9-10.3a** Determine the speaker's point of view or purpose in a text. **LC.SL.9-10.3b** Determine what arguments the speaker makes. **LC.SL.9-10.3c** Evaluate the evidence used to make the argument. **LC.SL.9-10.3d** Evaluate a speaker's point of view, reasoning, and use of evidence for false statements, faulty reasoning or exaggeration.
SL.9-10.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	**LC.SL.9-10.4** Report on a topic, using a logical sequence of ideas, appropriate facts and relevant, and descriptive details which support the main ideas.
SL.9-10.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	**LC.SL.9-10.5** Include digital or multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
SL.9-10.6 Adapt speech to a variety of contexts, audiences, and tasks, demonstrating command of formal English when indicated or appropriate.	No Louisiana Connectors written for this standard

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
L.9-10.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. a. Use parallel structure. b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.	**LC.L.9-10.1a** Use parallel structure (e.g., when using gerunds [-ing], infinitives, or voice [active or passive]) within writing. **LC.L.9-10.1b** Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey meaning and add interest to writing.
L.9-10.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. b. Use a colon to introduce a list or quotation. c. Spell correctly.	**LC.L.9-10.2a** Use a semicolon (i.e., link two or more related independent clauses) and/or colon (i.e., to introduce a list or quotation) appropriately in writing. **LC.L.9-10.2b** Spell correctly in writing.
L.9-10.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. a. Write and edit work so that it conforms to the guidelines in a style manual (e.g., *MLA Handbook*, Publication Manual of the American Psychological Association (APA), Turabian's *Manual for Writers*) appropriate for the discipline and writing type.	**LC.L.9-10.3** Write and edit work to conform to guidelines in a style manual.
L.9-10.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9–10 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	**LC.L.9-10.4a** Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position in a sentence) as a clue to the meaning of a word or phrase. **LC.L.9-10.4b** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. **LC.L.9-10.4c** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word.

Grades 9 and 10 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *analyze, analysis, analytical; advocate, advocacy*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**LC.L.9-10.4d** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the part of speech for a word. **LC.L.9-10.4e** Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).
L.9-10.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.	**LC.L.9-10.5a** Identify an oxymoron in a text. **LC.L.9-10.5b** Identify the denotation for a known word. **LC.L.9-10.5c** Interpret how literary devices advance the plot or affect the tone or pacing of a text. **LC.L.9-10.5d** Interpret figures of speech in context. **LC.L.9-10.5e** Explain differences or changes in the meaning of words with similar denotations.
L.9-10.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	**LC.L.9-10.6a** Use general academic and domain-specific words and phrases accurately. **LC.L.9-10.6b** Use newly acquired domain-specific words and phrases accurately.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.11-12.1 Cite strong, thorough, and relevant textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	**LC.RL.11-12.1a** Use two or more pieces of evidence to support inferences, conclusions, or summaries of the plot, purpose, or theme within a text. **LC.RL.11-12.1b** Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries or text. **LC.RL.11-12.1c** Use evidence to support conclusions about ideas not explicitly stated in the text.
RL.11-12.2 Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	**LC.RL.11-12.2a** Determine two or more themes or central ideas of an adapted grade-level text. **LC.RL.11-12.2b** Determine how the theme develops. **LC.RL.11-12.2c** Provide/create an objective summary of a text.
RL.11-12.3 Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama , including how the author develops character and setting, builds the plot and subplots, creates themes, and develops mood/atmosphere.	**LC.RL.11-12.3a** Analyze the author's choices about what is developed and included in the text and what is not developed and included related to story elements. **LC.RL.11-12.3b** Analyze author's choices about how to relate elements of the story (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).
RL.11-12.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful.	**LC.RL.11-12.4** Determine the meaning of words and phrases as they are used in a text including figurative (e.g., metaphors, similes, and idioms) and connotative meanings.
RL.11-12.5 Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.	**LC.RL.11-12.5** Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
RL.11-12.6 Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).	**LC.RL.11-12.6a** Define satire, sarcasm, irony. **LC.RL.11-12.6b** Differentiate from what is directly stated in a text from what is meant.
RL.11-12.7 Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text.	**LC.RL.11-12.7** Analyze multiple interpretations of a story drama, or poem (e.g., recorded or live productions of a play or recorded novel or poetry) evaluating how each version interprets the source text.
RL.11-12.8 (Not applicable to literature) [12]	
RL.11-12.9 Demonstrate knowledge of foundational works of U.S. and world literature, including how two or more texts from the same period treat similar themes or topics.	**LC.RL.11-12.9** Demonstrate knowledge of foundational words of U.S. and world literature, including how two or more texts from the same period treat similar themes or topics (e.g., historical reflection, social, morals).
RL.11-12.10 By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–workplace/postsecondary text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11 – workplace/postsecondary text complexity band independently and proficiently.	**LC.RL.11-12.10a** Read or be read to a variety of literary texts or adapted texts including historical novels, classical dramas or plays, poetry, novels written by international authors, and fiction. **LC.RL.11-12.10b** Independently read challenging grade-level literary texts. **LC.RL.11-12.10c** Use a variety of strategies to derive meaning from a variety of print and non-print literary texts.
RI.11-12.1 Cite strong, thorough, and relevant textual evidence to support analysis of what the text says explicitly as well as inferences	**LC.RI.11-12.1a** Use two or more pieces of evidence to support inferences, conclusions, or summaries or text.

[12] Standard 8 specifically addresses arguments of nonfiction text. Since Reading Literature is fictional text, a placeholder, "Not Applicable for Literature," has been placed by that standard. This standard is present in the non-fiction section.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
drawn from the text, including determining where the text leaves matters uncertain.	**LC.RI.11-12.1a** Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries in a text.
RI.11-12.2 Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	**LC.RI.11-12.2a** Determine two or more central ideas of a text. **LC.RI.11-12.2b** Determine how the central ideas develop. **LC.RI.11-12.2c** Determine how key details support the development of the central idea of a text. **LC.RI.11-12.2d** Create an objective summary of a text.
RI.11-12.3 Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.	**LC.RI.11-12.3a** Analyze key points throughout a text to determine the organizational pattern or text structure. **LC.RI.11-12.3b** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
RI.11-12.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).	**LC.RI.11-12.4** Determine the meaning of words and phrases as they are used in a text including figurative (e.g., metaphors, similes, and idioms) and connotative meanings.
RI.11-12.5 Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.	**LC.RI.11-12.5a** Analyze the structure an author uses in his or her exposition or argument. **LC.RI.11-12.5b** Evaluate the effectiveness of the structure an author uses in his or her exposition or argument, to determine whether the structure makes points clear, convincing.
RI.11-12.6 Determine an author's point of view or purpose in a text in which the rhetoric is considered particularly effective, analyzing how style and content contribute to the student interpretation of power, persuasiveness, or beauty of the text.	**LC.RI.11-12.6a** Determine the author's point of view or purpose in a text. **LC.RI.11-12.6b** Determine what arguments the author makes.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
	LC.RI.11-12.6c Determine/identify the specific language/words that the author uses that contribute to the power, persuasiveness or beauty of the text. **LC.RI.11-12.6d** Develop and explain ideas for why authors made specific word choices within text.
RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.	**LC.RI.11-12.7** Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.
RI.11-12.8 Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist,* presidential addresses).	**LC.RI.11-12.8a** Identify claims made by the author as being fact or opinion. **LC.RI.11-12.8b** Distinguish reliable sources from non-reliable. **LC.RI.11-12.8c** Evaluate the premises, purposes, argument that the author makes. **LC.RI.11-12.8d** Delineate the premises, purposes, argument and specific claims in two or more texts on related topics. **LC.RI.11-12.8e** Assess the validity of the premises, purposes, arguments across texts on related topics.
RI.11-12.9 Analyze foundational U.S. and world documents of historical and literary significance for their themes, purposes, and rhetorical features.	**LC.RI.11-12.9a** Identify central ideas and concepts in seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's —Letter from Birmingham Jail). **LC.RI.11-12.9b** Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's —Letter from Birmingham Jail), address similar central ideas.
RI.11-12.10 By the end of grade 11, read and comprehend literary nonfiction in the grades 11–workplace/postsecondary text complexity	**LC.RI.11-12.10a** Read or be read to a variety of informational texts or adapted texts.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–workplace/postsecondary text complexity band independently and proficiently.	**LC.RI.11-12.10b** Independently read challenging grade-level informational texts. **LC.RI.11-12.10c** Use a variety of strategies to derive meaning from a variety of print and non-print informational texts.
W.11-12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.	**LC.W.11-12.1a** Introduce claim(s) for an argument that reflects knowledge of the topic. **LC.W.11-12.1b** Use context or related text to establish the significance of the claim(s). **LC.W.11-12.1c** Identify claim(s) from alternate or opposing claims(s) in writing. **LC.W.11-12.1d** Create an organizational structure for a permanent product which logically sequences claim(s), counterclaims, reasons, and evidence (e.g., introduce claims, distinguish supporting and opposing claims and relevant evidence for each, provides conclusion). **LC.W.11-12.1e** Select the most relevant evidence for claim(s) and counterclaim(s). **LC.W.11-12.1f** Develop clear claim(s) with the most relevant evidence for a topic or text. **LC.W.11-12.1g** Use words, phrases, and clauses to create cohesion. **LC.W.11-12.1h** Use words, phrases, and clauses to clarify the relationship among claims, counterclaims, reasons, and evidence. **LC.W.11-12.1i** Maintain a consistent style and voice. **LC.W.11-12.1j** Provide a concluding statement or section that supports the argument presented by stating the significance of the claim and/or presenting next steps related to the topic.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
W.11-12.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	**LC.W.11-12.2a** Produce an informative/explanatory permanent product which has an introduction that clearly previews information to follow about a topic. **LC.W.11-12.2b** Create an organizational structure (e.g., cause/effect, compare/contrast, descriptions and examples) that groups information logically to support the stated topic. **LC.W.11-12.2c** Develop the topic (i.e., add additional information related to the topic) with facts, extended definitions, concrete details, quotations, or other information and examples that are most relevant to the focus and appropriate for the audience. **LC.W.11-12.2d** Use transitional words, phrases, and clauses that connect ideas and create cohesion within writing. **LC.W.11-12.2e** Use precise language, domain-specific vocabulary to manage the complexity of the topic. **LC.W.11-12.2f** Maintain a consistent style and voice. **LC.W.11-12.2g** Provide a concluding statement or section that follows from and supports the information or explanation presented.
W.11-12.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or	**LC.W.11-12.3a** Produce a narrative permanent product which engages and orients the reader by setting out a problem, situation, or observation and establishes one or multiple point(s) of view. **LC.W.9-10.3b** Use a variety of techniques to sequence events so they build on one another to create a smooth progression of experiences or

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, mood, tone, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise words and phrases, telling details, and figurative and sensory language to convey a vivid picture of the experiences, events, setting, mood, tone, and/or characters. e. Provide a conclusion (when appropriate to the genre) that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	events and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, resolution). **LC.W.11-12.3c** Include plot and pacing techniques (e.g., flashback, foreshadowing, suspense) as appropriate. **LC.W.11-12.3d** Include dialogue that advances the plot or theme (e.g., reveals character motivations, feelings, thoughts, how character has changed perspectives). **LC.W.11-12.3e** Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. **LC.W.11-12.3f** Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
W.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**LC.W.11-12.4** Produce a clear, coherent permanent product that is appropriate to the specific task (e.g., topic or text), purpose (e.g., to persuade or inform), or audience (e.g., reader).
W.11-12.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	**LC.W.11-12.5a** Develop a plan for permanent products (e.g., brainstorm topics, select a topic, gather information, create a draft) focused on a specific purpose and audience. **LC.W.11-12.5b** Strengthen writing by revising and editing (e.g., review a permanent product, strengthen an argument by finding relevant evidence as support, use hyphens correctly).
W.11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.	**LC.W.11-12.6** Use technology to produce and publish permanent products (e.g., use the Internet to gather information; use word processing to generate and collaborate on permanent products).

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	**LC.W.11-12.7** Follow steps to complete a short or sustained research project to build knowledge on a topic or text, answer a question and/or solve a problem (e.g., determine topic, locate information on a topic, organize information related to the topic, draft a permanent product).
W.11-12.8 Gather relevant information from multiple authoritative sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. (e.g., *MLA Handbook*, Publication Manual of the American Psychological Association).	**LC.W.11-12.8a** Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from authoritative print and/or digital sources relevant to a topic or stated claim. **LC.W.11-12.8b** Integrate information presented by others which is determined to be the most appropriate for the task, purpose, and audience into permanent products while avoiding plagiarism. **LC.W.11-12.8c** Use a standard format to write citations. **LC.W.11-12.8d** Provide a bibliography for sources that contributed to the creation of a permanent product.
W.11-12.9 Draw relevant evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research. a. Apply *grades 11–12 Reading standards* to literature (e.g., "Demonstrate knowledge of foundational works of literature, including how two or more texts from the same period treat similar themes or topics"). b. Apply *grades 11–12 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the reasoning in seminal U.S. and world texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes, and arguments in works of public advocacy.	**LC.W.11-12.9** Provide evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
W.11-12.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	No Louisiana Connectors written for this standard
SL.11-12.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 11–12 topics, texts, and issues,* building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.	**LC.SL.11-12.1a** Work with peers to promote democratic discussions. **LC.SL.11-12.1b** Actively seek the ideas or opinions of others in a discussion on a given topic or text. **LC.SL.11-12.1c** Consider a full range of ideas or positions on a given topic or text when presented in a discussion. **LC.SL.11-12.1d** Engage appropriately in discussion with others who have a diverse or divergent perspectives. **LC.SL.11-12.1e** Clarify, verify, or challenge ideas and conclusions within a discussion on a given topic or text **LC.SL.11-12.1f** Summarize points of agreement and disagreement within a discussion on a given topic or text. **LC.SL.11-12.1g** Use evidence and reasoning presented in discussion on topic or text to make new connections with own view or understanding.
SL.11-12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the	**LC.SL.11-12.2** Analyze credibility of sources and accuracy of information presented in social media regarding a given topic or text.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
credibility and accuracy of each source and noting any discrepancies among the data.	
SL.11-12.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.	**LC.SL.11-12.3a** Determine the speaker's point of view or purpose in a text. **LC.SL.11-12.3b** Determine what arguments the speaker makes. **LC.SL.11-12.3c** Evaluate the evidence used to make the speaker's argument. **LC.SL.11-12.3d** Evaluate a speaker's point of view, reasoning, use of evidence, and rhetoric for ideas, relationship between claims, reasoning, and evidence, and word choice.
SL.11-12.4 Present information, findings, and supporting evidence, while respecting intellectual property; convey a clear and distinct perspective, such that listeners can follow the line of reasoning, address alternative or opposing perspectives, and use organization, development, substance, and style that are appropriate to purpose, audience, and a range of formal and informal tasks.	**LC.SL.11-12.4** Report on a topic, using a logical sequence of ideas, appropriate facts and relevant, and descriptive details which support the main ideas.
SL.11-12.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	**LC.SL.11-12.5** Include digital or multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
SL.11-12.6 Adapt speech to a variety of contexts, audiences, and tasks, demonstrating a command of formal English when indicated or appropriate.	No Louisiana Connectors written for this standard
L.11-12.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.	No Louisiana Connectors written for this standard

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. b. Resolve issues of complex or contested usage, consulting references (e.g., *Merriam-Webster's Dictionary of English Usage, Garner's Modern American Usage*) as needed.	
L.11-12.2 Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. a. Observe hyphenation conventions. b. Spell correctly.	**LC.L.11-12.2a** Use hyphenation conventions. **LC.L.11-12.2b** Spell correctly.
L.11-12.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. a. Vary syntax for effect, consulting references (e.g., Tufte's *Artful Sentences*) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.	**LC.L.11-12.3a** Create and edit permanent products to conform to guidelines in a style manual. **LC.L.11-12.3b** Vary syntax within writing for effect.
L.11-12.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11–12 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its	**LC.L.11-12.4a** Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position in a sentence) as a clue to the meaning of a word or phrase. **LC.L.11-12.4b** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. **LC.L.11-12.4c** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word. **LC.L.11-12.4d** Consult print or digital reference materials (e.g., dictionaries, glossaries, thesauruses) to find the part of speech for a word.

Grades 11 and 12 English Language Arts	
Louisiana Student Standard	**Louisiana Connectors (LC)**
precise meaning, its part of speech, its etymology, or its standard usage. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**LC.L.11-12.4e** Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).
L.11-12.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.	**LC.L.11-12.5a** Identify hyperbole in a text. **LC.L.11-12.5b** Interpret how literary devices advance the plot or affect the tone or pacing of a text. **LC.L.11-12.5c** Interpret figures of speech in context. **LC.L.11-12.5d** Explain differences or changes in the meaning of words with similar denotations.
L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	**LC.L.11-12.6a** Use general academic and domain-specific words and phrases accurately. **LC.L.11-12.6b** Use newly acquired domain-specific words and phrases accurately.

Kindergarten Science MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	**LC-K-PS2-1a** Identify the effect caused by different strengths or directions of pushes and pulls on the motion of an object.
	LC-K-PS2-1b Explain the effect of pushes and pulls on the motion of an object.
	LC-K-PS2-1c Identify the effect of different strengths and directions of pushes and pulls on the motion of an object.
	LC-K-PS2-1d Compare different strengths or different directions of pushes and pulls on an object.
K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	**LC-K-PS2-2a** Identify if something designed to push or pull an object makes it move the way it is intended.
	LC-K-PS2-2b Identify if something designed to change the speed of an object makes it move the way it is intended.
	LC-K-PS2-2c Identify if something designed to change the direction of an object makes it move the way it is intended.

Kindergarten Science ENERGY	
K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.	**LC-K-PS3-1a** Identify examples of sunlight heating different surfaces on Earth.
K-PS3-2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	**LC-K-PS3-2a** Identify a design structure (e.g., umbrella, canopy, tent) that will reduce the warming caused by the sun.
	LC-K-PS3-2b Identify tools and materials that can be used to build a structure that will reduce the warming effect of sunlight on an area.

Kindergarten Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSESS	
K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.	**LC-K-LS1-1a** Identify that animals need water and food to live and grow.
	LC-K-LS1-1b Identify that plants need water and light to live and grow.
	LC-K-LS1-1c Identify patterns of what living things need to survive.

Kindergarten Science EARTH'S SYSTEMS	
K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.	**LC-K-ESS2-1a** Identify patterns in weather conditions using observations of local weather.
K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	**LC-K-ESS2-2a** Identify examples of how animals change their environments to meet their needs.
	LC-K-ESS2-2b Identify examples of how plants change their environments to meet their needs.
	LC-K-ESS2-2c Identify ways that humans can affect the environment in which they live.

Kindergarten Science EARTH AND HUMAN ACTIVITY	
K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	**LC-K-ESS3-1a** Given a model (e.g., representation, diagram, drawing), describe the relationship between the needs of different animals and the places they live (e.g., deer eat buds and leaves and live in forests).
K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for and respond to severe weather.	**LC-K-ESS3-2a** Identify how weather forecasting can help people avoid the most serious impacts of severe weather events.
K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	**LC-K-ESS3-3a** Identify different solutions that people can apply to the way they live to reduce the impact on the land, water, air, and other living things.

Grade 1 Science WAVES AND THEIR APPLICATIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	**LC-1-PS4-1a** Through collaborative investigations, recognize that sounds can cause materials to vibrate.
	LC-1-PS4-1b Through collaborative investigations, recognize that vibrating materials can make sound.
	LC-1-PS4-1c Use evidence to describe that vibrating materials can make sound.
	LC-1-PS4-1d Use evidence to describe that sound can make matter vibrate.
1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated.	**LC-1-PS4-2a** Through observations, recognize that objects can be seen only when illuminated by an external light source or when they give off their own light.
1-PS4-3 Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	**LC-1-PS4-3a** Through collaborative investigations, recognize that some materials allow light to pass through them.
	LC-1-PS4-3b Through collaborative investigations, recognize that some materials allow only some light to pass through them.
	LC-1-PS4-3c Through collaborative investigations, recognize that some materials block all the light.
1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	**LC-1-PS4-4a** When using tools and materials to design and build a device, identify features of devices that people use to send and receive information over long distances.

Grade 1 Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1-LS1-1 Use tools and materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	**LC-1-LS1-1a** Identify how animals use their external parts to help them survive, grow, and meet their needs.
	LC-1-LS1-1b Identify how plants use their external parts to help them survive, grow, and meet their needs.
	LC-1-LS1-1c Identify a design solution to a human problem which is similar to how a plant or animal uses its external parts to help it survive, grow, and meet its needs.
1-LS1-2 Read grade-appropriate texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	**LC-1-LS1-2a** Use texts or media to identify behaviors of offspring that help them survive.
	LC-1-LS1-2b Use texts or media to identify behaviors between parents and offspring that help the offspring survive.
	LC-1-LS1-2c Use texts or media to identify patterns in behavior between parents and offspring that help the offspring survive.

Grade 1 Science HEREDITY: INHERITANCE AND VARIATION OF TRAITS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are similar, but not exactly like, their parents.	**LC-1-LS3-1a** Make observations to identify a similarity or a difference in an external feature (e.g., shape of ears) between young animals and their parents.
	LC-1-LS3-1b Make observations to identify a similarity or a difference in an external feature (e.g., shape of leaves) between young plants and their parents.

Grade 1 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.	**LC-1-ESS1-1a** Use observations to describe patterns of movement of the sun, moon, and stars as seen from Earth.
	LC-1-ESS1-1b Use observations of patterns of movement to predict appearances of the sun or moon.
1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.	**LC-1-ESS1-2a** Use observations to make relative comparisons between the amount of daylight in the winter to the amount of daylight in the spring or fall.

Grade 2 Science MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	**LC-2-PS1-1a** Use data to describe different kinds of materials by their observable properties (e.g., color, texture).
	LC-2-PS1-1b Use data to classify different kinds of materials by their observable properties (e.g., color, texture).
2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.	**LC-2-PS1-2a** Match a property of a material (e.g., hard, flexible, absorbent) to a potential purpose (e.g., hardness of a wooden shelf results in it being better suited for supporting materials than a soft sponge).
2-PS1-3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.	**LC-2-PS1-3a** Identify how a variety of objects can be built up from a small set of pieces.
2-PS1-4 Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	**LC-2-PS1-4a** Identify examples of heating substances which cause changes that are sometimes reversible and sometimes not.
	LC-2-PS1-4b Identify examples of cooling substances which cause changes that are sometimes reversible and sometimes not.

Grade 2 Science ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2-LS2-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow.	**LC-2-LS2-1a** Use data to describe that plants need water and light to grow.
2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	**LC-2-LS2-2a** Identify that plants need animals to move their seeds around.
	LC-2-LS2-2b Identify a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Grade 2 Science BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.	**LC-2-LS4-1a** Make observations to explain that different kinds of living things live in different habitats on land and in water.

Grade 2 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	**LC-2-ESS1-1a** Use evidence to understand that some Earth events happen quickly and can be observed (e.g., flood, volcano eruption, earthquake, or erosion of soil).
	LC-2-ESS1-1b Use evidence to understand that some Earth events happen slowly (e.g., erosion or weathering of rocks).

Grade 2 Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
2-ESS2-1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.	**LC-2-ESS2-1a** Identify a solution (e.g., using shrubs, grass, or trees) to slow or prevent wind from changing the shape of the land.
	LC-2-ESS2-2b Identify a solution (e.g., using shrubs, grass, or trees) to slow or prevent water from changing the shape of the land.
2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area.	**LC-2-ESS2-2a** Use a model to Identify land features and bodies of water (e.g., hill, lake) in an area using a model.
2-ESS2-3 Obtain and communicate information to identify where water is found on Earth and that it can be solid or liquid.	**LC-2-ESS2-3a** Use information to identify that water is found in many types of places.
	LC-2-ESS2-3b Use information to identify that that water exists as solid ice and in liquid form.

Grade 3 Science MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-PS2-1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	**LC-3-PS2-1a** Identify ways to change the motion of an object (e.g., number, size, or direction of forces).
	LC-3-PS2-1b Describe how objects in contact exert forces on each other.
3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.	**LC-3-PS2-2a** Describe the patterns of an object's motion in various situations (e.g., a pendulum swinging, a ball moving on a curved track, a magnet repelling another magnet).
	LC-3-PS2-2b Predict future motion of an object given its pattern of motion.
3-PS2-3 Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.	**LC-3-PS2-3a** Ask questions to identify cause and effect relationships of magnetic interactions between two objects not in contact with each other (e.g., how the orientation of magnets affects the direction of the magnetic force).
	LC-3-PS2-3b Ask questions to identify cause and effect relationships of electric interactions (e.g., the force on hair from an electrically charged balloon) between two objects not in contact with each other (e.g., how the distance between objects affects the strength of the force).
3-PS2-4 Define a simple design problem that can be solved by applying scientific ideas about magnets.	**LC-3-PS2-4a** Identify and describe the scientific ideas necessary for solving a given problem about magnets (e.g., size of the force depends on the properties of objects, distance between the objects, and orientation of magnetic objects relative to one another).

Grade 3 Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.	**LC-3-LS1-1a** Identify that organisms have unique and diverse life cycles.
	LC-3-LS1-1b Identify a common pattern between models of different life cycles.

Grade 3 Science ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-LS2-1 Construct and support an argument that some animals form groups that help members survive.	**LC-3-LS2-1a** Describe that animals within a group help the group obtain food for survival, defend themselves, and survive changes in their ecosystem.

Grade 3 Science HEREDITY: INHERITANCE AND VARIATION OF TRAITS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from their parents and that variation of these traits exists in a group of similar organisms.	**LC-3-LS3-1a** Identify similarities in the traits of a parent and the traits of an offspring.
	LC-3-LS3-1b Identify that characteristics of organisms are inherited from their parents.
	LC-3-LS3-1c Identify variations in similar traits in a group of similar organisms.
3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.	**LC-3-LS3-2a** Identify examples of inherited traits that vary between organisms of the same type.
	LC-3-LS3-2b Identify a cause and effect relationship between an environmental factor and its effect on a given variation in a trait (e.g., not enough water produces plants that have fewer flowers than plants that had more water available).

Grade 3 Science BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.	**LC-3-LS4-1a** Identify that fossils represent plants and animals that lived long ago.
	LC-3-LS4-1b Identify that fossils provide evidence about the environments in which organisms lived long ago (e.g., fossilized seashells indicate shelled organisms that lived in aquatic environments).
3-LS4-2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.	**LC-3-LS4-2a** Identify features and characteristics that enable an organism to survive in a particular environment.
	LC-3-LS4-2b Identify features and characteristics that increase an organism's chances of finding mates.
	LC-3-LS4-2c Identify features and characteristics that increase an organism's chances of reproducing.
3-LS4-3 Construct and support an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	**LC-3-LS4-3a** Identify changes in a habitat that would cause some organisms to move to new locations.
	LC-3-LS4-3b Identify changes in a habitat that would cause some organisms to die.
3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	**LC-3-LS4-4a** Identify evidence that supports a claim that changes in habitats affect the organisms living there.
	LC-3-LS4-4b Identify a solution to a problem that is caused when the environment changes.

Grade 3 Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	**LC-3-ESS2-1a** Use data to describe observed weather conditions (e.g., temperature, precipitation, wind direction) during a season.
	LC-3-ESS2-1b Use data to predict weather conditions (e.g., temperature, precipitation, wind direction) during a season.
3-ESS2-2 Obtain and combine information to describe climates in different regions around the world.	**LC-3-ESS2-2a** Identify and describe climates in different regions of the world (e.g., equatorial, polar).

Grade 3 Science EARTH AND HUMAN ACTIVITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
3-ESS3-1 Make a claim about the merit of a design solution that reduces the impact of a weather-related hazard.	**LC-3-ESS3-1a** Identify the positive impact of a solution humans can take to reduce the impact of weather-related hazards (e.g., barriers to prevent flooding).

Grade 4 Science ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4-PS3-1 Use evidence to construct an explanation relating the speed of an object to the energy of that object.	**LC-4-PS3-1a** Identify that moving objects contain energy.
	LC-4-PS3-1b Demonstrate that objects moving faster possess more energy than objects moving slower.
4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.	**LC-4-PS3-2a** Identify examples of how energy can be moved from place to place (i.e., through sound or light traveling; by electrical currents; heat passing from one object to another).
4-PS3-3 Ask questions and predict outcomes about the changes in energy that occur when objects collide.	**LC-4-PS3-3a** Identify the change in energy or the change in objects' motions when objects collide (e.g., speeds as objects interact, direction).
4-PS3-4 Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.	**LC-4-PS3-4a** Relate an example that demonstrates that energy can be converted from one form to another form (e.g., electric circuits that convert electrical energy into light, motion, sound or heat).

Grade 4 Science WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4-PS4-1 Develop a model of waves to describe patterns in terms of amplitude and wavelength and to show that waves can cause objects to move.	**LC-4-PS4-1a** Describe the properties of waves using a model (e.g., drawings, diagrams) to show amplitude (height) and wavelength.
	LC-4-PS4-1b Identify relationships involving wave amplitude, wavelength, and the motion of an object (e.g., when the amplitude increases, the object moves more).
	LC-4-PS4-1c Identify amplitude as a measure of energy in a wave.
	LC-4-PS4-1d Identify wavelength as the distance between a point on one wave and the identical point on the next wave.
4-PS4-2 Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.	**LC-4-PS4-2a** Arrange a model to show that light can be seen when light reflected from its surface enters the eye.

Grade 4 Science FROM MOLECULES TO ORGANISMS: STRUCTURE AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	**LC-4-LS1-1a** Identify external macroscopic structures (e.g., bird beaks, eyes, feathers, roots, needles on a pine tree) that support growth, survival, behavior, and reproduction of organisms.
	LC-4-LS1-1b Identify internal structures (e.g., heart, muscles, bones) that support growth, survival, behavior, and reproduction of organisms.
4-LS1-2 Construct an explanation to describe how animals receive different types of information through their senses, process the information in their brains, and respond to the information in different ways.	**LC-4-LS1-2a** Identify that sense receptors provide different kinds of information, which is processed by the brain.
	LC-4-LS1-2b Identify how animals use their sense receptors to respond to different types of information (e.g., sound, light, odor, temperature) in their surroundings with behaviors that help them survive.
	LC-4-LS1-2c Identify how animals use their memories to help them survive.

Grade 4 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4-ESS1-1 Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in landforms over time.	**LC-4-ESS1-1a** Identify rock formations that show how the Earth's surface has changed over time (e.g., change following earthquakes).
	LC-4-ESS1-1b Identify older fossils as being found in deeper, older rock layers.

Grade 4 Science EARTH'S SYSTEM	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4-ESS2-1 Plan and conduct investigations on the effects of water, ice, wind, and vegetation on the relative rate of weathering and erosion.	**LC-4-ESS2-1a** Use data to compare differences in the shape of the land due to the effects of weathering or erosion.
	LC-4-ESS2-1b Identify how living things affect the shape of the land.
4-ESS2-2 Analyze and interpret data from maps to describe patterns of Earth's features.	**LC-4-ESS2-2a** Use maps to locate different land and water features of Earth.
	LC-4-ESS2-2b Use maps to determine that earthquakes and volcanoes often occur along the boundaries between continents.
4-ESS2-3 Ask questions that can be investigated and predict reasonable outcomes about how living things affect the physical characteristics of their environment.	**LC-4-ESS2-3a** Identify how plants affect the environment (e.g., some have roots that can stabilize or destabilize the soil).
	LC-4-ESS2-3b Identify how animals affect the environment (e.g., they disturb rocks, soil, and sediment; some build dams or nests).

Grade 4 Science EARTH AND HUMAN ACTIVITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from renewable and non-renewable resources and how their uses affect the environment.	**LC-4-ESS3-1a** Identify the origins of the natural sources humans use for energy and fuel.
	LC-4-ESS3-1b Identify environmental effects associated with the use of a given energy resource.
4-ESS3-2 Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	**LC-4-ESS3-2a** Describe solutions to reduce the impact of a natural Earth process (e.g., earthquake, flood, volcanic activity) on humans.

Grade 5 Science MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.	**LC-5-PS1-1a** Identify in a model (e.g., picture, diagram) which shows that all matter can be broken down into smaller and smaller pieces until they are too small to be seen by human eyes.
5-PS1-2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total amount of matter is conserved.	**LC-5-PS1-2a** Identify using measurements that the total weight of matter is conserved when it changes form.
	LC-5-PS1-2b Identify using measurements that the total weight of matter is conserved before and after they are heated, cooled, or mixed.
5-PS1-3 Make observations and measurements to identify materials based on their properties.	**LC-5-PS1-3a** Identify that materials can be classified based on a variety of observable physical properties (e.g., shape, texture, buoyancy, color, magnetism, solubility).
	LC-5-PS1-3b Classify materials (e.g., shape, texture, buoyancy, color, magnetism, solubility) by measurable physical properties.
5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	**LC-5-PS1-4a** Identify that when two or more different substances are mixed, a new substance with different properties may be formed.
	LC-5-PS1-4b Identify the changes that occur when two or more substances are mixed using evidence provided from data.

Grade 5 Science MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-PS2-1 Support an argument that the gravitational force exerted by the Earth is directed down.	**LC-5-PS2-1a** Identify that the gravitational force exerted by Earth on objects is directed down.

Grade 5 Science MATTER AND ENERGY IN ORGANISMS AND ECOSYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.	**LC-5-PS3-1a** Identify that the energy in animals' food was once energy from the sun.

Grade 5 Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-LS1-1 Ask questions about how air and water affect the growth of plants.	**LC-5-LS1-1a** Identify that plants acquire material for growth chiefly from air and water, not from soil.

Grade 5 Science ECOSYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	**LC-5-LS2-1a** Identify a model that shows the movement of matter (e.g., plant growth, eating, composting) through living things.

Grade 5 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-ESS1-1 Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from the Earth.	**LC-5-ESS1-1a** Identify that the sun appears larger and brighter than other stars because the sun is much closer to Earth than other stars.
5-ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.	**LC-5-ESS1-2a** Describe similarities and differences in the timing of observable changes in shadows.
	LC-5-ESS1-2b Describe similarities and differences in the timing of observable changes in day and night.
	LC-5-ESS1-2c Describe similarities and differences in the timing of observable changes in the appearance of stars that are visible only in particular months

Grade 5 Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.	**LC-5-ESS2-1a** Describe that the Earth's major systems interact and affect Earth's surface materials and processes.
5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.	**LC-5-ESS2-2a** Determine that the majority of water on Earth is found in the oceans as salt water and most of the Earth's fresh water is stored in glaciers.

Grade 5 Science EARTH AND HUMAN ACTIVITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
5-ESS3-1 Generate and compare multiple solutions about ways individual communities can use science to protect the Earth's resources and environment.	**LC-5-ESS3-1a** Identify ways people can help protect the Earth's resources and environment.

Grade 6 Science MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.	**LC-6-MS-PS1-1a** Identify a model that shows an atom's nucleus is made of protons and neutrons, and is surrounded by electrons.
	LC-6-MS-PS1-1b Identify a model that shows individual atoms of the same or different types that repeat to form compounds (e.g., sodium chloride).

Grade 6 Science MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-PS2-1 Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.	**LC-6-MS-PS2-1a** Describe the motion of two colliding objects in terms of the strength of the force and the relationship of action and reaction forces given a model or scenario.
	LC-6-MS-PS2-1b Develop a solution to a problem involving the motion of two colliding objects.
6-MS-PS2-2 Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.	**LC-6-MS-PS2-2a** Identify using provided data, that a change in an object's motion is due to the mass of an object and the forces acting on that object.
6-MS-PS2-3 Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.	**LC-6-MS-PS2-3a** Identify that electricity can be used to produce magnetism, or magnetism can be used to make electricity.
	LC-6-MS-PS2-3b Examine data of objects (e.g., a model that demonstrates that a piece of metal, when magnetized by electricity, can pick up many times its own weight) to identify cause and effect relationships that affect electromagnetic forces.
6-MS-PS2-4 Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.	**LC-6-MS-PS2-4a** Using a chart displaying the mass of those objects and the strength of interaction, compare the magnitude of gravitational force on interacting objects of different mass (e.g., the Earth and the sun)
6-MS-PS2-5 Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.	**LC-6-MS-PS2-5a** Evaluate a change in the strength of a force (i.e., electric and magnetic) using data.
	LC-6-MS-PS2-5b Identify evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

Grade 6 Science ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.	**LC-6-MS-PS3-1a** Use graphical displays of data to describe the relationship of kinetic energy to the mass of an object and to the speed of an object.
6-MS-PS3-2 Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.	**LC-6-MS-PS3-2a** Describe, using models, how changing distance changes the amount of potential energy stored in the system (e.g., carts at varying positions on a hill).

Grade 6 Science WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-PS4-1 Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave and how the frequency and wavelength change the expression of the wave.	**LC-6-MS-PS4-1a** Identify how the amplitude of a wave is related to the energy in a wave using a mathematical or graphical representation.
6-MS-PS4-2 Develop and use a model to describe that waves are refracted, reflected, absorbed, transmitted, or scattered through various materials.	**LC-6-MS-PS4-2a** Describe, using a model, how sound waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass).
	LC-6-MS-PS4-2b Describe, using a model, how light waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass).

Grade 6 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-ESS1-1 Develop and use a model of the Earth-sun-moon system to describe the reoccurring patterns of lunar phases, eclipses of the sun and moon, and seasons.	**LC-6-MS-ESS1-1a** Use an Earth-sun-moon model to show that the Earth-moon system orbits the sun once an Earth year and the orbit of the moon around Earth corresponds to a month.
	LC-6-MS-ESS1-1b Use an Earth-sun-moon model to explain eclipses of the sun and the moon.
	LC-6-MS-ESS1-1c Use an Earth-sun-moon model to explain how variations in the amount of the sun's energy hitting Earth's surface results in seasons.
6-MS-ESS1-2 Use a model to describe the role of gravity in the motions within galaxies and the solar system.	**LC-6-MS-ESS1-2a** Use a model to identify the solar system as one of many systems orbiting the center of the larger system of the Milky Way galaxy, which is one of many galaxy systems in the universe.
	LC-6-MS-ESS1-2b Use a model to describe the relationships and interactions between components of the solar system as a collection of many varied objects held together by gravity.
6- MS-ESS1-3 Analyze and interpret data to determine scale properties of objects in the solar system.	**LC-6-MS-ESS1-3a** Use data (e.g., statistical information, drawings and photographs, and models) to determine similarities and differences among solar system objects.

Grade 6 Science EARTH AND HUMAN ACTIVITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-ESS3-4 Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.	**LC-6-MS-ESS3-4** Identify changes that human populations have made to Earth's natural systems using a variety of resources.

Grade 6 Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-LS1-1 Conduct an investigation to provide evidence that living things are made of cells, either one or many different numbers and types.	**LC-6-MS-LS1-1a** Identify that living things may be made of one cell or many different numbers and types of cells.
6-MS-LS1-2 Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.	**LC-6-MS-LS1-2a** Using a model(s), identify the function of a cell as a whole.
	LC-6-MS-LS1-2b Using a model(s), identify special structures within cells are responsible for particular functions.
	LC-6-MS-LS1-2c Using a model(s), identify the components of a cell.
	LC-6-MS-LS1-2d Using a model(s), identify the functions of components of a cell.

Grade 6 Science ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
6-MS-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	**LC-6-MS-LS2-1a** Recognize data that shows growth of organisms and population increases are limited by access to resources.
	LC-6-MS-LS2-1b Identify factors (e.g., resources, climate or competition) in an ecosystem that influence growth in populations of organisms.
6-MS-LS2-2 Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.	**LC-6-MS-LS2-2a** Use an explanation of interactions between organisms in an ecosystem to identify examples of competitive, predatory, or symbiotic relationships.
6-MS-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	**LC-6-MS-LS2-3a** Using a model(s), describe energy transfer between producers and consumers in an ecosystem using a model (e.g., producers provide energy for consumers).
	LC-6-MS-LS2-3b Using a model(s), describe the cycling of matter among living and nonliving parts of a defined system (e.g., the atoms that make up the organisms in an ecosystem are cycled repeatedly between the living and nonliving parts of the ecosystem).

Grade 7 Science MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-PS1-2 Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	**LC-7-MS-PS2-1a** Using data, identify changes that occur after a chemical reaction has taken place (e.g., change in color occurs, gas is created, heat or light is given off or taken in).
7-MS-PS1-4 Develop a model that predicts and describes changes in particle motion, temperature, and the state of a pure substance when thermal energy is added or removed.	**LC-7-MS-PS1-4a** Use drawings and diagrams to Identify that adding or removing thermal energy increases or decreases particle motion until a change of state occurs.
7-MS-PS1-5 Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.	**LC-7-MS-PS1-5a** Use a model to identify a chemical reaction in which the mass of the reactants is shown to be equal to the mass of the products.
	LC-7-MS-PS1-5b Use a model to show how the total number of atoms does not change in a chemical reaction and thus mass is conserved.

Grade 7 Science ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-PS3-4 Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.	**LC-7-MS-PS3-4a** Using examples and data measurements, describe the relationship between different masses of the same substance and the change in average kinetic energy when thermal energy is added to or removed from the system.

Grade 7 Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-ESS2-4 Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	**LC-7-MS-ESS2-4a** Using a model(s), identify components in a model of water cycling among land, ocean, and atmosphere, and recognize how it is propelled by sunlight and gravity.
7-MS-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.	**LC-7-MS-ESS2-5a** Using data, identify how water influences weather and weather patterns through atmospheric, land, and oceanic circulation.
	LC-7-MS-ESS2-5b Using data, identify examples of how the sun drives all weather patterns on Earth (e.g., flow of energy that moves through Earth's land, air, and water).
7-MS-ESS2-6 Develop and use a model to describe how unequal heating and rotation of the Earth causes patterns of atmospheric and oceanic circulation that determine regional climates.	**7-MS-ESS2-6a** Using a model(s), identify that as the sun's energy warms the air over the land (expands and rises), the air over the ocean (cooler air) rushes in to take its place and is called wind (sea breeze).
	7-MS-ESS2-6b Using a model(s), identify that weather and climate vary with latitude, altitude, and regional geography.

Grade 7 Science EARTH AND HUMAN ACTIVITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-ESS3-5 Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	**LC-7-MS-ESS3-5a** Identify evidence of the effects of human activities on changes in global temperatures over the past century using a variety of resources (e.g., tables, graphs, and maps of global and regional temperatures; atmospheric levels of gases, such as carbon dioxide and methane; and rates of human activities).
	LC-7-MS-ESS3-5b Using a variety of resources, ask questions or make observations about how the effects of human activities have changed global temperatures.

Grade 7 Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-LS1-3 Use an argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.	**LC-7-MS-LS1-3a** Identify that the body is a system of multiple interacting subsystems.
	LC-7-MS-LS1-3b Identify evidence which supports a claim about how the body is composed of various levels of organization for structure and function which includes cells, tissues, organs, organ systems, and organisms using models or diagrams.
7-MS-LS1-6 Construct a scientific explanation based on evidence for the role of photosynthesis and cellular respiration in the cycling of matter and flow of energy into and out of organisms.	**LC-MS-LS1-6** Use a scientific explanation about photosynthesis to identify the movement of matter and flow of energy as plants use the energy from light to make sugars.
7-MS-LS1-7 Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.	**LC-7-MS-LS1-7a** Use a model to identify the outcome of the process of breaking down food molecules (e.g., sugar) as the release of energy, which can be used to support other processes within the organism.

Grade 7 Science ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-LS2-5 Undertake a design project that assists in maintaining diversity and ecosystem services.	**LC-7-MS-LS2-5a** Identify a design project that shows the stability of an ecosystem's biodiversity is the foundation of a healthy, functioning ecosystem.
7-MS-LS2-4 Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.	**LC-7-MS-LS2-4a** Using evidence, identify the outcome of changes in physical or biological components of an ecosystem to populations of organisms in that ecosystem.

Grade 7 Science HEREDITY: INHERITANCE AND VARIATION OF TRAITS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-LS3-2 Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.	**LC-7-MS-LS3-2a** Using a model(s), identify that in asexual reproduction identical inherited traits are passed from parents to offspring.
	LC-7-MS-LS3-2b Using a model(s), identify that in sexual reproduction a variety of inherited traits are passed from parents to offspring and lead to differences in offspring (e.g., eye color).

Grade 7 Science BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
7-MS-LS4-4 Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.	**LC-7-MS-LS4-4a** Identify a similarity or difference in an external feature (e.g., shape of ears on animals or shape of leaves on plants) between young plants and animals and their parents.
	LC-7-MS-LS4-4b Describe the relationship between genetic variation and the success of organisms in a specific environment (e.g., individual organisms that have genetic variations and traits that are disadvantageous in a particular environment will be less likely to survive, and those traits will decrease from generation to generation due to natural selection).
7-MS-LS4-5 Gather, read, and synthesize information about technologies that have changed the way humans influence the inheritance of desired traits in organisms.	**LC-7-MS-LS4-5a** Identify ways in which technologies (e.g., artificial selection for breeding of certain plants and animals) have changed the way humans influence the inheritance of desired traits in plants and animals.

Grade 8 Science MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.	**LC-8-MS-PS1-1a** Using a model(s), identify that an atom's nucleus as made of protons and neutrons and is surrounded by electrons.
	LC-8-MS-PS1-1b Using a model(s), identify that individual atoms of the same or different types that repeat to form extended structures (e.g., sodium chloride).
8-MS-PS1-3 Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.	**LC-8-MS-PS1-3a** Compare and contrast characteristics of natural and synthetic materials (e.g., fibers) from provided information (e.g., text, media, visual displays, data).
	LC-8-MS-PS1-3b Identify ways in which natural resources undergo a chemical process to form synthetic materials (e.g., medicine, textiles, clothing) which impact society.
8-MS-PS1-6 Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.	**LC-8-MS-PS1-6a** Identify a chemical process that releases or absorbs thermal energy (e.g., dissolving ammonium chloride or calcium chloride) which, given the features of a problem, may provide a solution.
	LC-8-MS-PS1-6b Identify a way to test or modify a device that either releases or absorbs thermal energy by chemical processes

Grade 8 Science ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.	**LC-8-MS-PS3-3a** Use information (e.g., graph, model) to identify a device (e.g., foam cup, insulated box) that either minimizes or maximizes thermal energy transfer (e.g., keeping liquids hot or cold).
8-MS-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.	**LC-8-MS-PS3-5a** Using information from graphical displays of data and models, describe the change in the kinetic energy of an object as energy transferred to or from an object.

Grade 8 Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-ESS1-4 Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's geologic history.	**LC-8-MS-ESS1-4a** Sequence the relative order of events from Earth's history shown by rock strata and patterns of layering (organize was more complex as a task/term than sequence).

Grade 8 Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-ESS2-1 Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.	**LC-8-MS-ESS2-1a** Identify relationships between components in a model showing the cycling of energy flows and matter within and among Earth's systems, including the sun and Earth's interior as primary energy sources.
8-MS-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.	**LC-8-MS-ESS2-2a** Identify examples of processes to explain that change Earth's surface at varying time and spatial scales that can be large (e.g., plate motions) or small (e.g., landslides).
8-MS-ESS2-3 Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and sea floor structures to provide evidence of the past plate motions.	**LC-8-MS-ESS2-3a** Using graphical displays of data, identify how the shapes of the continents (e.g., fit like a jigsaw puzzle) and fossil comparisons (e.g., fit together) along the edges of continents to demonstrate lithospheric plate movement.

Grade 8 Science EARTH AND HUMAN ACTIVITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-ESS3-1 Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.	**LC-8-MS-ESS3-1a** Identify explanations of the uneven distributions of Earth's minerals, energy, and groundwater resources due to past and current geoscience processes or by removal of resources.
8-MS-ESS3-2 Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	**LC-8-MS-ESS3-2a** Use maps, charts, and images of natural hazards to look for patterns in past occurrences of catastrophic events in each of two regions to predict which location may receive a future similar catastrophic event.
	LC-8-MS-ESS3-2b Identify technologies that mitigate the effects of natural hazards (e.g., the design of buildings and bridges to resist earthquakes, storm shelters for tornados, levees along rivers to prevent flooding).
8-MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.	**LC-8-MS-ESS3-3** Using data from a design solution for minimizing a human impact on the environment, identify limitations of the solution.

Grade 8 Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-LS1-4 Construct and use argument(s) based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of survival and successful reproduction of animals and plants respectively.	**LC-8-MS-LS1-4a** Identify behaviors animals engage in (e.g., vocalization) that increase the likelihood of reproduction.
	LC-8-MS-LS1-4b Identify specialized plant structures (e.g., bright flower parts) that increase the likelihood of reproduction.
8-MS-LS1-5 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	**LC-8-MS-LS1-5a** Identify a scientific explanation for how environmental factors (e.g., availability of light, space, water, size of habitat) affect the growth of animals and plants.
	LC-8-MS-LS1-5b Identify a scientific explanation for how genetic factors (e.g., specific breeds of plants and animals and their typical sizes) affect the growth of animals and plants.

Grade 8 Science HEREDITY: INHERITANCE AND VARIATION OF TRAITS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-LS3-1 Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.	**LC-8-MS-LS3-1a** Use a model to explain how genetic variations in specific traits may occur as organisms pass on their genetic material from one generation to the next, along with small changes.

Grade 8 Science BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
8-MS-LS4-1 Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.	**LC-8-MS-LS4-1a** Use data to identify that fossils of different animals that lived at different times are placed in chronological order (i.e., fossil record) and located in different sedimentary layers.
8-MS-LS4-2 Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.	**LC-8-MS-LS4-2a** Recognize that similarities and differences in external structures can be used to infer evolutionary relationships between living and fossil organisms.
	LC-8-MS-LS4-2b Identify an explanation of the evolutionary relationships between modern and fossil organisms.
8-MS-LS4-3 Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.	**LC-8-MS-LS4-3a** Identify patterns (i.e., pictorial displays, representations, data) in the embryological development as evidence of relationships among species.
8-MS-LS4-6 Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations of species over time.	**LC-8-MS-LS4-6a** Analyze numerical data sets that represent a proportional relationship between some change in the environment and corresponding changes in genetic variation (i.e., traits) over time.

Physical Science MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS1-1 Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level and the composition of the nucleus of atoms.	**LC-HS-PS1-1a** Identify the periodic table as a model to use to predict the properties of elements.
	LC-HS-PS1-1b Identify that the periodic table was created based on the patterns of electrons in the outermost energy level of atoms.
	LC-HS-PS1-1c Identify that the number of electrons in the outermost energy level of atoms impacts the behavior of the element.
	LC-HS-PS1-1d Identify the periodic table as a model that predicts the number of electrons and other subatomic particles.
HS-PS1-2 Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.	**LC-HS-PS1-2a** Identify an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms.
	LC-HS-PS1-2b Identify an explanation for the outcome of a simple chemical reaction based on trends in the periodic table.
	LC-HS-PS1-2c Construct an explanation for the outcome of a simple chemical reaction based on the chemical properties of the elements involved.
HS-PS1-7 Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.	**LC-HS-PS1-7a** Identify a chemical equation, and identify the reactants and products which support the claim that matter (i.e., atoms) is neither created or destroyed in a chemical reaction.
	LC-HS-PS1-7b Identify a mathematical representation (e.g., table, graph) or pictorial depictions that illustrates the claim that mass is conserved during a chemical reaction.
HS-PS1-8 Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.	**LC-HS-PS1-8a** Identify models that illustrate nuclear processes (i.e., fusion, fission, and radioactive decays), involve the release or absorption of energy.
	LC-HS-PS1-8b Contrast changes during the processes of alpha, beta, or gamma radioactive decay using graphs or pictorial depictions of the composition of the nucleus of the atom and the energy released.

Physical Science MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS2-1 Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.	**LC-HS-PS2-1a** Predict changes in the motion of a macroscopic object, such as a falling object, an object rolling down a ramp, or a moving object being pulled by a constant force using data (e.g., tables or graphs of position or velocity as a function of time for an object subject to a net unbalanced force).
HS-PS2-2 Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.	**LC-HS-PS2-2a** Identify an example of the law of conservation of momentum (e.g., in a collision, the momentum change of an object is equal to and opposite of the momentum change of the other object) represented using graphical or visual displays (e.g., pictures, pictographs, drawings, written observations, tables, charts).
HS-PS2-3 Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.	**LC-HS-PS2-3a** Evaluate a device (e.g., football helmet or a parachute) designed to minimize force by comparing data (i.e., momentum, mass, velocity, force, or time).
HS-PS2-5 Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.	**LC-HS-PS2-5a** Identify situations and provide evidence where an electric current is producing a magnetic field.
	LC-HS-PS2-5b Identify situations and provide evidence where a magnetic field is producing an electric current.

Physical Science ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS3-2 Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles/objects and energy associated with the relative positions of particles/objects.	**LC-HS-PS3-2a** Identify that two factors, an object's mass and height above the ground, affect gravitational potential energy (i.e., energy stored due to position of an object above Earth) at the macroscopic level.
	LC-HS-PS3-2b Identify that the mass of an object and its speed determine the amount of kinetic energy the object possesses.
HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	**LC-HS-PS3-3a** Identify the forms of energy that will be converted by a device that converts one form of energy into another form of energy.
	LC-HS-PS3-3b Identify steps in a model of a device showing the transformations of energy that occur (e.g., solar cells, solar ovens, generators, turbines).
	LC-HS-PS3-3c Describe constraints to the design of the device which converts one form of energy into another form of energy (e.g., cost or efficiency of energy conversion).
HS-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).	**LC-HS-PS3-4a** Identify the temperatures of two liquids of different temperature before mixing and after combining to show uniform energy distribution.
	LC-HS-PS3-4b Investigate the transfer of thermal energy when two substances are combined within a closed system.
HS-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.	**LC-HS-PS3-5a** Use a model to identify the cause and effect relationships between forces produced by electric or magnetic fields and the change of energy of the objects in the system.

Physical Science WAVES AND THEIR APPLICATIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.	**LC-HS-PS4-1a** Qualitatively describe cause and effect relationships between changes in wave speed and type of media through which the wave travels using mathematical and graphical representations.
	LC-HS-PS4-1b Identify examples that illustrate the relationship between the frequency and wavelength of a wave.
	LC-HS-PS4-1c Identify evidence that the speed of a wave depends on the media through which it travels.
PS4-4 Evaluate the validity and reliability of claims in published materials regarding the effects that different frequencies of electromagnetic radiation have when absorbed by matter.	**LC-PS4-4a** Recognize the relationship between the damage to living tissue from electromagnetic radiation and the energy of the radiation.

Chemistry MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS1-1 Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level and the composition of the nucleus of atoms.	**LC-HS-PS1-1a** Identify the periodic table as a model to use to predict the properties of elements.
	LC-HS-PS1-1b Identify that the periodic table was created based on the patterns of electrons in the outermost energy level of atoms.
	LC-HS-PS1-1c Identify that the number of electrons in the outermost energy level of atoms impacts the behavior of the element.
	LC-HS-PS1-1d Identify the periodic table as a model that predicts the number of electrons and other subatomic particles.
HS-PS1-2 Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.	**LC-HS-PS1-2a** Identify an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms.
	LC-HS-PS1-2b Identify an explanation for the outcome of a simple chemical reaction based on trends in the periodic table.
	LC-HS-PS1-2c Construct an explanation for the outcome of a simple chemical reaction based on the chemical properties of the elements involved.
HS-PS1-3 Plan and conduct an investigation to gather evidence to compare the structure of substances at the macroscale to infer the strength of electrical forces between particles.	**LC-HS-PS1-3a** Identify bulk properties of substances (i.e., melting point, boiling point, and surface tension).
	LC-HS-PS1-3b Identify that electrical forces within and between atoms can keep particles close together.
	LC-HS-PS1-3c Conduct an experiment to gather evidence of the strength of electrical forces between particles.
HS-PS1-4 Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy.	**LC-HS-PS1-4a** Determine whether energy is released or absorbed in a chemical reaction system using various types of models (e.g., drawings, graphs, etc.).

Chemistry MATTER AND ITS INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS1-5 Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.	**LC-HS-PS1-5a** Identify the effects of changing the temperature of the reacting particles at the rate at which a simple reaction (i.e., two reactants) occurs using a model (e.g., a table of data) of the number and energy of collisions between particles.
	LC-HS-PS1-5b Identify the effects of changing the concentration of the reacting particles at the rate at which a simple reaction (i.e., two reactants) occurs using a model (e.g., a table of data) of the number and energy of collisions between particles.
HS-PS1-6 Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium.	**LC-HS-PS1-6a** Identify a change in one variable (i.e., temperature, concentration, pressure) of a chemical equation that would produce increased amounts of products at equilibrium.
HS-PS1-7 Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.	**LC-HS-PS1-7a** Identify a chemical equation, and identify the reactants and products which support the claim that matter (i.e., atoms) is neither created or destroyed in a chemical reaction.
	LC-HS-PS1-7b Identify a mathematical representation (e.g., table, graph) or pictorial depictions that illustrates the claim that mass is conserved during a chemical reaction.
HS-PS1-8 Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.	**LC-HS-PS1-8a** Identify models that illustrate nuclear processes (i.e., fusion, fission, and radioactive decays), involve the release or absorption of energy.
	LC-HS-PS1-8b Contrast changes during the processes of alpha, beta, or gamma radioactive decay using graphs or pictorial depictions of the composition of the nucleus of the atom and the energy released.

Chemistry MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS2-6 Communicate scientific and technical information about why the atomic-level, subatomic-level, and/or molecular level structure is important in the functioning of designed materials.	**LC-HS-PS2-6a** Communicate that different materials have different molecular structures and properties which determine different functioning of the material (e.g., flexible, but durable).

Chemistry ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.	**LC-HS-PS3-1a** Identify a model showing the change in the energy of one component in a system compared to the change in energy of another component in the system.
	LC-HS-PS3-1b Identify a model showing the change in energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	**LC-HS-PS3-3a** Identify the forms of energy that will be converted by a device that converts one form of energy into another form of energy.
	LC-HS-PS3-3b Identify steps in a model of a device showing the transformations of energy that occur (e.g., solar cells, solar ovens, generators, turbines).
	LC-HS-PS3-3c Describe constraints to the design of the device which converts one form of energy into another form of energy (e.g., cost or efficiency of energy conversion).
HS-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).	**LC-HS-PS3-4a** Identify the temperatures of two liquids of different temperature before mixing and after combining to show uniform energy distribution.
	LC-HS-PS3-4b Investigate the transfer of thermal energy when two substances are combined within a closed system.
HS-PS3-6 Evaluate the validity and reliability of claims in published materials about the viability of nuclear power as a source of alternative energy relative to other forms of energy (e.g., fossil fuels, wind, solar, geothermal).	**LC-HS-PS3-6a** Identify the relationship between increasing energy demand and the technologies developed to meet these needs.
	LC-HS-PS3-6b Identify an alternative energy system with minimal social and environmental consequences.
	LC-HS-PS3-6c Evaluate a claim about nuclear energy as an alternative source of energy as opposed to other forms of energy.

Physics MOTION AND STABILITY: FORCES AND INTERACTIONS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS2-1 Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.	**LC-HS-PS2-1a** Predict changes in the motion of a macroscopic object, such as a falling object, an object rolling down a ramp, or a moving object being pulled by a constant force using data (e.g., tables or graphs of position or velocity as a function of time for an object subject to a net unbalanced force).
HS-PS2-2 Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.	**LC-HS-PS2-2a** Identify an example of the law of conservation of momentum (e.g., in a collision, the momentum change of an object is equal to and opposite of the momentum change of the other object) represented using graphical or visual displays (e.g., pictures, pictographs, drawings, written observations, tables, charts).
HS-PS2-3 Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.	**LC-HS-PS2-3a** Evaluate a device (e.g., football helmet or a parachute) designed to minimize force by comparing data (i.e., momentum, mass, velocity, force, or time).
HS-PS2-4 Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects.	**LC-HS-PS2-4a** Use Newton's law of universal gravitation as a mathematical model to qualitatively describe or predict the effects of gravitational forces in systems with two objects.
	LC-HS-PS2-4b Use Coulomb's law to qualitatively describe or predict the electrostatic forces in systems with two objects.
HS-PS2-5 Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.	**LC-HS-PS2-5a** Identify situations and provide evidence where an electric current is producing a magnetic field.
	LC-HS-PS2-5b Identify situations and provide evidence where a magnetic field is producing an electric current.

Physics ENERGY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.	**LC-HS-PS3-1a** Identify a model showing the change in the energy of one component in a system compared to the change in energy of another component in the system.
	LC-HS-PS3-1b Identify a model showing the change in energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
HS-PS3-2 Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles (objects) and energy associated with the relative positions of particles (objects).	**LC-HS-PS3-2a** Identify that two factors, an object's mass and height above the ground, affect gravitational potential energy (i.e., energy stored due to position of an object above Earth) at the macroscopic level.
	LC-HS-PS3-2b Identify that the mass of an object and its speed determine the amount of kinetic energy the object possesses.
HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	**LC-HS-PS3-3a** Identify the forms of energy that will be converted by a device that converts one form of energy into another form of energy.
	LC-HS-PS3-3b Identify steps in a model of a device showing the transformations of energy that occur (e.g., solar cells, solar ovens, generators, turbines).
	LC-HS-PS3-3c Describe constraints to the design of the device which converts one form of energy into another form of energy (e.g., cost or efficiency of energy conversion).
HS-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).	**LC-HS-PS3-4a** Identify the temperatures of two liquids of different temperature before mixing and after combining to show uniform energy distribution.
	LC-HS-PS3-4b Investigate the transfer of thermal energy when two substances are combined within a closed system.
HS-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.	**LC-HS-PS3-5a** Use a model to identify the cause and effect relationships between forces produced by electric or magnetic fields and the change of energy of the objects in the system.
	LC-HS-PS4-3b Identify a model or description of electromagnetic radiation as a particle model.

Physics WAVES AND THIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.	**LC-HS-PS4-1a** Qualitatively describe cause and effect relationships between changes in wave speed and type of media through which the wave travels using mathematical and graphical representations.
	LC-HS-PS4-1b Identify examples that illustrate the relationship between the frequency and wavelength of a wave.
	LC-HS-PS4-1c Identify evidence that the speed of a wave depends on the media through which it travels.
HS-PS4-3 Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other.	**LC-HS-PS4-3a** Identify a model or description of electromagnetic radiation as a wave model.

Earth Science EARTH'S PLACE IN THE UNIVERSE	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS1-1 Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation.	**LC-HS-ESS1-1a** Describe components of a model illustrating that the sun shines because of nuclear fusion reactions which release light and heat energy which make life on Earth possible.
HS-ESS1-3 Communicate scientific ideas about the way stars, over their life cycle, produce elements.	**LC-HS-ESS1-3a** Communicate by using models that solar activity creates elements through nuclear fusion.
HS-ESS1-4 Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.	**LC-HS-ESS1-4a** Recognize that objects in the solar system orbit the sun and have an orderly motion (e.g., elliptical paths around the sun).
	LC-HS-ESS1-4b Relate Earth's orbital characteristics to other bodies in the solar system.
	LC-HS-ESS1-4c Use a mathematical or computational representation to predict the motion of orbiting objects in the solar system.
HS-ESS1-5 Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.	**LC-HS-ESS1-5a** Explain the relationship between the motion of continental plates and how materials of different ages are arranged on Earth's surface.
	LC-HS-ESS1-5b Relate/evaluate evidence of past and/or current movements in Earth's crust (plate tectonics) with the ages of crustal rocks.

Earth Science HISTORY OF EARTH	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS1-6 Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.	**LC-HS-ESS1-6a** Identify ancient Earth materials, lunar rocks, asteroids, and meteorites as sources of evidence scientists use to understand Earth's early history.

Earth Science SPACE SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS1-2 Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.	**LC-HS-ESS1-2a** Identify that the universe is expanding and must have been smaller in the past based on astronomical evidence (i.e., light spectra, motion of distant galaxies, and composition of matter in the universe).

Earth Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS2-1 Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.	**LC-HS-ESS2-1a** Use a model of Earth to identify that the motion of the mantle and its plates occurs primarily through thermal convection, which is primarily driven by radioactive decay within Earth's interior.
HS-ESS2-2 Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth's systems.	**LC-HS-ESS2-2a** Identify relationships, using a model, of how the Earth's surface is a complex and dynamic set of interconnected systems (i.e., geosphere, hydrosphere, atmosphere, and biosphere).
HS-ESS2-3 Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection.	**LC-HS-ESS2-3a** Use a model of Earth to identify that the motion of the mantle and its plates occurs primarily through thermal convection, which is primarily driven by radioactive decay within Earth's interior.
HS-ESS2-4 Analyze and interpret data to explore how variations in the flow of energy into and out of Earth's systems result in changes in atmosphere and climate.	**LC-HS-ESS2-4a** Identify different causes of climate change and results of those changes with respect to the Earth's surface temperatures, precipitation patterns or sea levels over a wide range of temporal and spatial scales using a model.
HS-ESS2-5 Plan and conduct an investigation on the properties of water and its effects on Earth materials and surface processes.	**LC-HS-ESS2-5a** Identify a connection between the properties of water and its effects on Earth materials.
	LC-HS-ESS2-5b Investigate the effects of water on Earth materials and/or surface processes.
HS-ESS2-6 Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.	**LC-HS-ESS2-6a** Use a model of photosynthesis to identify that carbon is exchanged between living and nonliving systems.
	LC-HS-ESS2-6b Use a model of cellular respiration to identify that carbon is exchanged between living and nonliving systems.
	LC-HS-ESS2-6c Develop and/or use a quantitative model to identify relative amount of and/or the rate at which carbon is transferred among hydrosphere, atmosphere, geosphere, and biosphere.
HS-ESS2-7 Construct an argument based on evidence about the simultaneous coevolution of Earth systems and life on Earth.	**LC-HS-ESS2-7a** Identify examples of coevolution of Earth's systems and the evolution of life on Earth.
	LC-HS-ESS2-7b Identify evidence (e.g., causal links and/or feedback mechanisms between changes in the biosphere and changes in Earth's other systems) in an argument that there is simultaneous coevolution of Earth's systems and life on Earth.

Earth Science HUMAN SUSTAINABILITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.	**LC-HS-ESS3-1a** Explain the relationship between human activity (e.g., population size, where humans live, types of crops grown) and changes in the amounts of natural resources using evidence.
	LC-HS-ESS3-1b Explain the relationship between human activity (e.g., population size, where humans live, types of crops grown) and changes in the occurrence of natural hazards using evidence.
HS-ESS3-2 Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.	**LC-HS-ESS3-2a** Identify a solution that demonstrates the most preferred cost-benefit ratios for developing, managing, and utilizing energy and mineral resources (i.e., conservation, recycling, and reuse of resources).
	LC-HS-ESS3-2b Compare design solutions for developing, managing, and/or utilizing energy or mineral resources.
HS-ESS3-3 Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	**LC-HS-ESS3-3a** Use numerical data to determine the effects of a conservation strategy to manage natural resources and to sustain human society and plant and animal life.
HS-ESS3-4 Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	**LC-HS-ESS3-4a** Connect a technological solution (e.g., wet scrubber; baghouse) to its outcome (e.g., clean air) and its outcome to the human activity impact that it is reducing (e.g., air pollution).
HS-ESS3-5 Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.	**LC-ESS3-5a** Use geoscience data to determine the relationship between a change in climate (e.g., precipitation, temperature) and its impact in a region.
HS-ESS3-6 Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.	**LC-HS-ESS3-6a** Use representations to describe the relationships among Earth systems and how those relationships are being modified due to human activity (e.g., increase in atmospheric carbon dioxide, increase in ocean acidification, effects on organisms in the ocean (coral reef), carbon cycle of the ocean, possible effects on marine populations).

Life Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-LS1-1 Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.	**LC-HS-LS1-1a** Relate DNA molecules to the way cells store and use information to guide their functions.
	LC-HS-LS1-1b Relate groups of specialized cells (e.g., heart cells, nerve cells, muscle cells, epithelial cells, fat cells, blood cells) within organisms to the performance of essential functions of life.
	LC-HS-LS1-1c Identify evidence supporting an explanation of how a substance called DNA carries genetic information in all organisms which codes for the proteins that are essential to an organism.
HS-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.	**LC-HS-LS1-2a** Using model(s), identify that different systems of the body carry out essential functions (e.g., digestive system, respiratory system, circulatory system, nervous system).
	LC-HS-LS1-2b Using model(s), identify the hierarchical organization of systems that perform specific functions within multicellular organisms.
HS-LS1-3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis in living organisms.	**LC-HS-LS1-3a** Identify how different organisms react (e.g., heart rate, body temperature) to changes in their external environment.
	LC-HS-LS1-3b Identify examples of how organisms use feedback mechanisms to maintain dynamic homeostasis.
HS-LS1-4 Use a model to illustrate the role of the cell cycle and differentiation in producing and maintaining complex organisms.	**LC-HS-LS1-4a** Identify how growth and/or maintenance (repair/replacement) occurs when cells multiply (i.e., mitosis) using a model.
HS-LS1-5 Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy.	**LC-HS-LS1-5a** Identify model of photosynthesis, which shows the conversion of light energy to stored chemical energy.
HS-LS1-6 Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.	**LC-HS-LS1-6a** Using a model(s), identify how organisms take in matter and rearrange the atoms in chemical reactions to form different products allowing for growth and maintenance.
HS-LS1-7 Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen	**LC-HS-LS1-7a** Using a model(s), identify respiration as the transfer of stored energy to the cell to sustain life's processes (i.e., energy to muscles or energy for maintaining body temperature).

Life Science FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy.	
HS-LS1-8 Obtain, evaluate, and communicate information about (1) viral and bacterial reproduction and adaptation, (2) the body's primary defenses against infection, and (3) how these features impact the design of effective treatment.	**LC-LS1-8a** Identify the process by which a virus uses a host cell's functions to make new viruses.
	LC-LS1-8b Recognize that most bacteria reproduce asexually resulting in two cells exactly like the parent cell.
	LC-LS1-8c Identify ways to protect against infectious diseases to maintain a body's health (e.g., eat nutritious food, washing hands, rest, exercise, etc.).
	LC-LS1-8d Identify treatments and/or prevention of viral and/or bacterial infections (e.g., antibiotics and vaccines).

Life Science ECOSYSTEMS: INTERACTIONS, ENERGY AND DYNAMICS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-LS2-1 Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity, biodiversity and populations of ecosystems at different scales.	**LC-HS-LS2-1a** Recognize that the carrying capacities of ecosystems are related to the availability of living and nonliving resources and challenges (e.g., predation, competition, disease).
	LC-HS-LS2-1b Use a graphical representation to identify carrying capacities in ecosystems as limits to the numbers of organisms or populations they can support.
HS-LS2-4 Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.	**LC-HS-LS2-4a** Use a graphical or mathematical representation to identify the changes in the amount of matter as it travels through a food web.
	LC-HS-LS2-4b Use a graphical or mathematical representation to identify the changes in the amount of energy as it travels through a food web.
HS-LS2-6 Evaluate the claims, evidence and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.	**LC-HS-LS2-6a** Use evidence to identify how modest biological or physical changes versus extreme changes affect stability and change (e.g., number and types of organisms) in ecosystems.
	LC-HS-LS2-6b Evaluate explanations of how living things in an ecosystem are affected by changes in the environment (e.g., changes to the food supply, climate change, or the introduction of predators).
	LC-HS-LS2-6c Evaluate explanations of how interactions in ecosystems maintain relatively stable conditions, but changing conditions may result in a new ecosystem.
HS-LS2-7 Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	**LC-HS-LS2-7a** Describe how people can help protect the Earth's environment and biodiversity (e.g., preserving ecosystems) and how a human activity would threaten Earth's environment and biodiversity (e.g., pollution, damaging habitats, over hunting).
	LC-HS-LS2-7b Evaluate or refine a solution to changes in an ecosystem (biodiversity) resulting from a human activity.

Life Science HEREDITY: INHERITANCE AND VARIATION OF TRAITS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-LS3-1 Formulate, refine, and evaluate questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.	**LC-HS-LS3-1a** Identify that DNA molecules in all cells contain the instructions for traits passed from parents to offspring.
	LC-HS-LS3-1b Identify appropriate questions about the relationships between DNA and chromosomes and how traits are passed from parents to offspring.
HS-LS3-2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.	**LC-HS-LS3-2a** Identify a model showing evidence that parents and offspring may have different traits.
	LC-HS-LS3-2b Identify that meiosis is a process which distributes genetic material among the new cells (i.e., gametes) produced, which results in genetic variation.
	LC-HS-LS3-2c Identify that when DNA makes a copy of itself, sometimes errors occur that may lead to genetic variations.
	LC-HS-LS3-2d Identify examples of mutations in DNA caused by environmental factors.
	LC-HS-LS3-2e Use evidence to support a claim about a source of inheritable genetic variations.
HS-LS3-3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.	**LC-HS-LS3-3a** Calculate the probability (e.g., two out of four) of a particular trait in an offspring based on a completed Punnett square.
	LC-HS-LS3-3b Identify examples, using data, of environmental factors which affect the expression of traits, and so then affect the probability of occurrences of traits in a population.

Life Science BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-LS4-1 Analyze and interpret scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.	**LC-HS-LS4-1a** Identify patterns (e.g., DNA sequences, fossil records) as evidence to a claim of common ancestry.
HS-LS4-2 Construct an explanation based on evidence that biological diversity is influenced by (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.	**LC-HS-LS4-2a** Recognize that as a species grows in number, competition for limited resources also increases.
	LC-HS-LS4-2b Recognize that different individuals have specific traits that give advantages (e.g., survive and reproduce at higher rates) over other individuals in the species.
	LC-HS-LS4-2c Identify how evolution may be a result of genetic variation through mutations and sexual reproduction in a species that is passed on to their offspring.
HS-LS4-3 Apply concepts of statistics and probability to support explanations that populations of organisms adapt when an advantageous heritable trait increases in proportion to organisms lacking this trait.	**LC-HS-LS4-3a** Use patterns in data to identify how heritable variations in a trait may lead to an increasing proportion of individuals within a population with that trait (i.e., an advantageous characteristic).
HS-LS4-4 Construct an explanation based on evidence for how natural selection and other mechanisms lead to genetic changes in populations.	**LC-HS-LS4-4a** Use data to provide evidence for how specific biotic or abiotic differences in ecosystems (e.g., ranges of seasonal temperature, acidity, light, geographic barriers) support the claim that organisms with an advantageous heritable trait are better able to survive over time.
HS-LS4-5 Evaluate evidence supporting claims that changes in environmental conditions can affect the distribution of traits in a population causing: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.	**LC-HS-LS4-5a** Identify the relationship between naturally occurring or human-induced changes in the environment (e.g., drought, flood, deforestation, fishing, application of fertilizers) and the expression of traits in a species (e.g., peppered moth studies).
	LC-HS-LS4-5b Identify the relationship between naturally occurring or human-induced changes in the environment (e.g., drought, flood, deforestation, fishing, application of fertilizers) and the emergence of new species over time.
	LC-HS-LS4-5c Identify that species become extinct because they can no longer survive and reproduce given changes in the environment.

Environmental Science RESOURCES AND RESOURCE MANAGEMENT	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-EVS1-1 Analyze and interpret data to identify the factors that affect sustainable development and natural resource management in Louisiana.	**LC-HS-EVS1-1a** Identify factors (e.g., human activity, population size, types of crops grown) that affect sustainable development in Louisiana.
	LC-HS-EVS1-1b Identify factors (e.g., human activity, population size, types of crops grown) that affect natural resource management in Louisiana.
HS-EVS1-2 Obtain, evaluate and communicate information on the effectiveness of management or conservation practices for one of Louisiana's natural resources with respect to common considerations such as social, economic, technological, and influencing political factors over the past 50 years.	**LC-HS-EVS1-2a** Identify the effectiveness of management practices for one of Louisiana's natural resources related to social factors over the past 50 years.
	LC-HS-EVS1-2b Identify the effectiveness of management practices for one of Louisiana's natural resources related to economic factors over the past 50 years.
	LC-HS-EVS1-2c Identify the effectiveness of management practices for one of Louisiana's natural resources related to technological factors over the past 50 years.
	LC-HS-EVS1-2d Identify the effectiveness of management practices for one of Louisiana's natural resources related to political factors over the past 50 years.
HS-EVS1-3 Analyze and interpret data about the consequences of environmental decisions to determine the risk-benefit values of actions and practices implemented for selected issues.	**LC-HS-EVS1-3a** Identify the risk-benefit values of implemented actions using data for selected environmental issues.
	LC-HS-ESV1-3b Identify the risk-benefit values of implemented practices using data for selected environmental issues.

Environmental Science ENVIRONMENTAL AWARENESS AND PROTECTION	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-EVS2-1 Design and evaluate a solution to limit the introduction of non-point source pollution into state waterways.	**LC-HS-EVS2-1a** Use data or qualitative scientific and technical information to evaluate a solution to limit a non-point source pollution (e.g., land or urban runoff, abandoned mines) into state waterways.
HS-EVS2-2 Use a model to predict the effects that pollution as a limiting factor has on an organism's population density.	**LC-HS-EVS2-2a** Recognize the relationship between pollution and its effect on an organism's population size.
	LC-HS-EVS2-2b Predict the effects that pollution as a limiting factor has on an organism's population density using a model (e.g., mathematical, diagrams, simulations).
HS-EVS2-3 Use multiple lines of evidence to construct an argument addressing the negative impacts that introduced organisms have on Louisiana's native species.	**LC-HS-EVS2-3a** Evaluate evidence supporting an argument regarding negative impacts of introduced organisms (e.g., zebra mussel, fire ant, nutria) have on Louisiana's native species.

Environmental Science PERSONAL RESPONSIBILITIES	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-EVS3-1 Construct and evaluate arguments about the positive and negative consequences of using disposable resources versus reusable resources.	**LC-HS-EVS3-1** Evaluate evidence supporting the positive consequences of using disposable resources versus reusable resources.
	LC-HS-EVS3-2 Evaluate evidence supporting the negative consequences of using disposable resources versus reusable resources.

Environmental Science EARTH'S SYSTEMS	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS2-2 Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth's systems.	**LC-HS-ESS2-2a** Identify relationships, using a model, of how the Earth's surface is a complex and dynamic set of interconnected systems (i.e., geosphere, hydrosphere, atmosphere, and biosphere).
HS-ESS2-4 Analyze and interpret data to explore how variations in the flow of energy into and out of Earth's systems result in changes in atmosphere and climate.	**LC-HS-ESS2-4a** Identify different causes of climate change and results of those changes with respect to the Earth's surface temperatures, precipitation patterns or sea levels over a wide range of temporal and spatial scales using a model.
HS-ESS2-5 Plan and conduct an investigation on the properties of water and its effects on Earth materials and surface processes.	**LC-HS-ESS2-5a** Identify a connection between the properties of water and its effects on Earth materials.
	LC-HS-ESS2-5b Investigate the effects of water on Earth materials and/or surface processes.
HS-ESS2-6 Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.	**LC-HS-ESS2-6a** Use a model of photosynthesis to identify that carbon is exchanged between living and nonliving systems.
	LC-HS-ESS2-6b Use a model of cellular respiration to identify that carbon is exchanged between living and nonliving systems.
	LC-HS-ESS2-6c Develop and/or use a quantitative model to identify relative amount of and/or the rate at which carbon is transferred among hydrosphere, atmosphere, geosphere, and biosphere.

Environmental Science HUMAN SUSTAINABILITY	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.	**LC-HS-ESS3-1a** Explain the relationship between human activity (e.g., population size, where humans live, types of crops grown) and changes in the amounts of natural resources using evidence.
	LC-HS-ESS3-1b Explain the relationship between human activity (e.g., population size, where humans live, types of crops grown) and changes in the occurrence of natural hazards using evidence.
HS-ESS3-2 Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.	**LC-HS-ESS3-2a** Identify a solution that demonstrates the most preferred cost-benefit ratios for developing, managing, and utilizing energy and mineral resources (i.e., conservation, recycling, and reuse of resources).
	LC-HS-ESS3-2b Compare design solutions for developing, managing, and/or utilizing energy or mineral resources.
HS-ESS3-3 Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	**LC-HS-ESS3-3** Use numerical data to determine the effects of a conservation strategy to manage natural resources and to sustain human society and plant and animal life.
HS-ESS3-4 Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	**LC-HS-ESS3-4a** Connect a technological solution (e.g., wet scrubber; baghouse) to its outcome (e.g., clean air) and its outcome to the human activity impact that it is reducing (e.g., air pollution).
HS-ESS3-6 Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.	**LC-HS-ESS3-6a** Use representations to describe the relationships among Earth systems and how those relationships are being modified due to human activity (e.g., increase in atmospheric carbon dioxide, increase in ocean acidification, effects on organisms in the ocean (coral reef), carbon cycle of the ocean, possible effects on marine populations).

Environmental Science ECOSYSTEMS: INTERACTIONS, ENERGY AND DYNAMIC	
Louisiana Student Standards	**Louisiana Connectors (LC)**
HS-LS2-1 Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity, biodiversity and populations of ecosystems at different scales.	**LC-HS-LS2-1a** Recognize that the carrying capacities of ecosystems are related to the availability of living and nonliving resources and challenges (e.g., predation, competition, disease).
	LC-HS-LS2-1b Use a graphical representation to identify carrying capacities in ecosystems as limits to the numbers of organisms or populations they can support.
HS-LS2-4 Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.	**LC-HS-LS2-4a** Use a graphical or mathematical representation to identify the changes in the amount of matter as it travels through a food web.
	LC-HS-LS2-4b Use a graphical or mathematical representation to identify the changes in the amount of energy as it travels through a food web.
HS-LS2-6 Evaluate the claims, evidence and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.	**HS-LS2-6a** Use evidence to identify how modest biological or physical changes versus extreme changes affect stability and change (e.g., number and types of organisms) in ecosystems.
	HS-LS2-6b Evaluate explanations of how living things in an ecosystem are affected by changes in the environment (e.g., changes to the food supply, climate change, or the introduction of predators).
	HS-LS2-6c Evaluate explanations of how interactions in ecosystems maintain relatively stable conditions, but changing conditions may result in a new ecosystem.
HS-LS2-7 Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	**LC-HS-LS2-7a** Describe how people can help protect the Earth's environment and biodiversity (e.g., preserving ecosystems) and how a human activity would threaten Earth's environment and biodiversity (e.g., pollution, damaging habitats, over hunting).
	LC-HS-LS2-7b Evaluate or refine a solution to changes in an ecosystem (biodiversity) resulting from a human activity.

Additional Resources

for the Louisiana Connectors

Introduction to the

Essential Elements Cards

Teachers have the challenge of teaching multiple students who are all at different levels of understanding on a specific topic. For the specialist teacher of students with significant disabilities, there is the added undertaking of planning for students across multiple settings. The Essential Elements Cards are available to assist educators with individualizing instruction for students with significant disabilities both in inclusive and self-contained environments.

These cards promote understanding of how students move toward the Louisiana Student Standards. Each contains one or more Louisiana Connector. The Essential Elements cards are ordered first by strand (e.g., literature, informational text; measurement, data and probability), then by grade span for ELA (e.g. K-2, 3-5) and individual grades for mathematics (e.g., 6, 7), and finally by the aligned standards and Connectors (e.g. 1, 2, 3).

While there are not yet Essential Elements Cards for every Louisiana Connector, there are resources associated with all strands and grade levels. To find a specific Essential Elements Card, select a file from the appropriate strand in your content area (e.g., Informational Text; Geometry). In ELA, select the grade band (e.g., 9-10) for which you are planning and open the .pdf document; in math, simply open the grade (e.g., 6 or 7) or subject-appropriate (e.g., Algebra I, Algebra II) file. Once there, do a search for either the Louisiana Student Standards or the Louisiana Connector you seek.

Within each Essential Elements Card (EEC) are features specific to each content area. Both begin by listing the Louisiana Student Standard and aligned Louisiana Connector. For mathematics, each EEC starts by identifying concrete understandings and representations that include measurable and observable content that is challenging, yet attainable. Then, for both ELA and mathematics, each EEC offers suggested instructional strategies to guide teacher planning and implementation. Each then provides suggested supports for students so that they can demonstrate what they know. The EECs are intended to assist teachers in developing instructional lessons that support all students in accessing grade-level material.

We are indebted to the work of the National Center and State Collaborative for the contents contained in this document. Please see NCSC's Element Cards for further information.

Louisiana Student Standard

- **2.NBT.A.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Louisiana Connector

- **LC.3.NBT.A.1** Use place value to round to the nearest 10 or 100.

Concrete Understandings:

- Identify ones, tens, hundreds place.
- Use a place value chart.
- Recognize that numbers 1-4 are closer to 0 and numbers 6 through 9 are closer to 10.
- Identify 5 as a number in the middle, but know that we round up.

Representation:

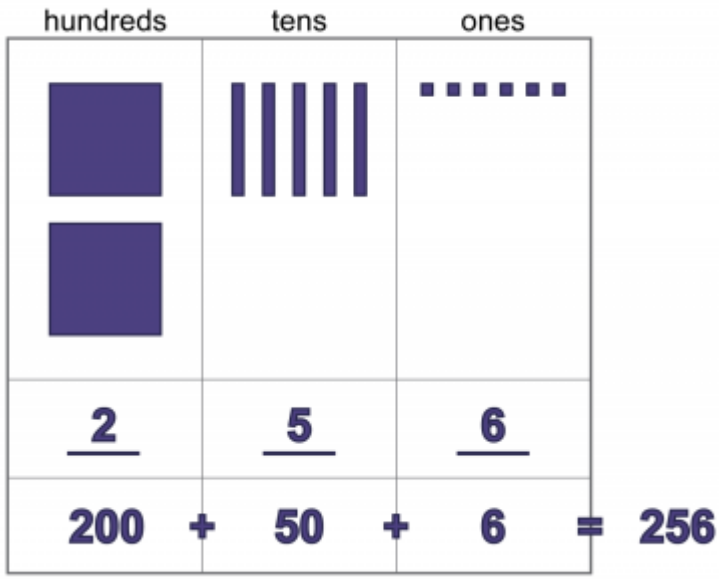
- Identify the nearest ten and the nearest hundred
- Understand the following concepts, symbols, and vocabulary: place value, ones, tens, hundreds

Suggested Instructional Strategies:

- Use video resources (e.g., Brain Pop Jr. http://www.brainpopjr.com/math/numbersense/rounding/preview.weml)
- Explicit instruction of the rules
- Task analysis (e.g., if rounding to the tens place, find the ten above and below the number, use rules to determine whether to round up or down)

Suggested Supports and Scaffolds:

- Make rules available on a "cheat sheet"
- Number line
- Interactive whiteboard or other technology to manipulate representations
- Assistive Technology


hundreds
tens
ones
2
5
6
200 + 50 + 6 = 256

Grade K	Grade 1	Grade 2
Louisiana Standard • **RI.K.8** With prompting and support, identify the reason(s) an author gives to support point(s) in a text.	**Louisiana Standard** • **RI.1.8** Identify the reasons an author gives to support points in a text.	**Louisiana Standard** • **RI.2.2** Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text. • **RI.2.8** Describe how reasons or evidence support specific points the author makes in a text.
Louisiana Connector • **LC.RI.K.8** With prompting and support, identify the facts an author gives to support points in a text.	**Louisiana Connector** • **LC.RI.1.8** Identify the facts and details an author gives to support points in a text.	**Louisiana Connector** • **LC.RI.2.2b** Identify the focus of a paragraph and the details that support the focus in an informational text. • **LC.RI.2.8a** Identify the facts and details an author gives to support points in a text.

Suggested Instructional Strategies:

Write to Understand

- **Information Coding for Main Topic: Information Coding:** Provide the students with a copy of the text the students for students to mark. Students should then create a coding system to help them mark and understand the text. The coding system might look something like this:

• Code	• Meaning
• _____	• Here is the focus of a paragraph.
• ***	• This is a fact and detail that support the focus of the paragraph.

Graphic Organizer (e.g., bubble)

- List the topic of a text or multi-media and note events and/or details that support the topic (e.g., the best time to plant pumpkins, how long it takes them to grow and ripen, typical size, uses, etc.).
- Use a system of least prompts used when selecting a supporting detail.

Sort to Understand

- **Fact Sorting:** Make a set of sorting cards with various sentences/paragraphs from the informational text. On different sorting cards, write facts from the text and other sentences that do not include facts from the text (they could be opinions or they could be facts about different sets of information). Create two category cards: Facts from the Text and Not Facts from the Texts. Then, individually, in small groups, or with the whole class sort the evidence into the two categories.

Model to Understand

- **Think aloud:** Model the thought processes that occur while reading the text. This may include: asking questions while reading the text, identifying important details, identifying the topic, and identifying the main idea.

Key Details

- Using a text from a read aloud, shared reading lesson, or guided reading lesson, the teacher can model how to select and organize the key details using a story graphic organizer.

Suggested Supports and Scaffolds:

- Coding sheets
- Copies of informational texts for each student
- Sorting cards
- Various informational Texts
- Interactive White Board
- Highlighted important information

- Graphic organizers
- Prepared objects, pictures, words, sentence strips, or recorded communication supports to provide access to content and facilitate responding
- Dichotomous questions that allow for making a choice of correct versus incorrect answers
- Simpler or shorter text with the same key events or details
- Peer support, collaborative grouping
- Preview of the text and events, frontloading
- Content delivered using multi-media (e.g., book, storyboard, video, computer, etc.)

Adapting Lesson Plans
for Students with Significant Disabilities

Teaching Louisiana Student Standards to students who participate in the LEAP Connect for Students with Significant Disabilities ensures teachers create educational opportunities for all students to work toward grade-level content. While the content remains constant, differential expectations for achievement are established by simplifying and prioritizing content and creating individualized adaptations for students with significant disabilities to learn the same concepts.

General education teachers know what content is most important for each grade and they often have developed activities and materials that can be readily adapted for students with significant disabilities. For those students who participate in the general education setting, the logical point of departure would be for specialists to work with the classroom teacher to create universally designed lesson plans that include all students. For others, additional adaptations will be needed to address unique learning differences. For examples of approaches with both, please refer to the case studies found on the Louisiana Believes website. The following table outlines a simplified process for thinking through lesson plan adaptation for students with significant disabilities.

Step 1 – Identify whole class standard and lesson	
Step 2 – Identify aligned Louisiana Connector	
Step 3 – Create student-specific objective and assessment	
Step 4 – Create aligned activities	
Step 5 – Identify appropriate supports and scaffolds	

ELA Exemplar

The following table serves as an example of how one teacher thought about adapting a lesson plan for a specific student. The content is aligned to the case study of a 3rd grade student, Tara, found on the Louisiana Believes website.

Step 1 – Identify whole class standard and lesson	Tara's teacher identified that the whole class would be working on the "Because of Winn Dixie" unit, specifically the standard: ***RL.3.3*** *Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.*
Step 2 – Identify aligned Louisiana Connector	Tara's teacher identified the aligned Louisiana Connector: ***LC.RL.3.3b*** *Describe a character's traits in a story using details from the text and illustrations.*
Step 3 – Create student-specific objective and assessment	Tara's teacher created a specific objective for Tara to begin the unit: *Student will be able to identify main characters in "Because of Winn Dixie" by selecting appropriate figurines for each character.*
Step 4 – Create aligned activities	Tara's teacher creates an individualized activity to introduce Tara to the characters in the novel: • Two objects placed on Tara's tray (girl, dog) • Tara is shown and then touches each one • No-delay prompt, "This is Winn Dixie, the dog" with hand-over-hand placement • Check for understanding "You find Winn Dixie, the dog" • Praise and repeat for all objects • Review all objects once more, with appropriate delays
Step 5 – Identify appropriate supports and scaffolds	Tara's teacher identifies the appropriate ways to scaffold the introduction of the characters: • Figurines and other manipulatives • Individual trays • Questions of increasing difficulty related to characters/ traits

Mathematics Exemplar

The following table serves as an example of how one teacher thought about adapting a lesson plan for a specific student. The content is aligned to the case study of Carlos, Grade 6, found on the Louisiana Believes website.

Step 1 – Identify whole class standard and lesson	Carlos's teacher identified that the whole class would be working on a Eureka lesson, specifically the standard: ***6.SP.B.4*** *Display numerical data in plots on a number line, including dot plots, histograms, and box plots.*
Step 2 – Identify aligned Louisiana Connector	Carlos's teacher identified the aligned Louisiana Connector: ***LC.6.SP.B.4*** *Collect and graph data: bar graph, line plots, dot plots, histograms.*
Step 3 – Create student-specific objective and assessment	Carlos's teacher created a specific objective for his student: *Student will be able to create a dot plot both with and absent of context.*
Step 4 – Create aligned activities	Carlos's teacher creates an individualized activity to introduce Carlos to the concepts and skills required: • Setting up: umber line and dot placement instructions • Model problem • Least intrusive prompt to guide through problem • Write responses • Solve equation • Independent practice
Step 5 – Identify appropriate supports and scaffolds	Carlos's teacher identifies potential ways to scaffold instruction: • Calculator • Graphic organizer • Interactive whiteboard • Computer software • Self-monitoring task analysis for student independence

Student Response Modes
for Students with Significant Disabilities

It is important to identify the best way for your student to show what they know in each lesson. Here are some options to consider:

- **Point to the correct response when given an array -** The number of options in the array may vary depending on the student's current skills. An array of four is often used with one correct answer, at least one plausible incorrect answer, and two other distractors. Be sure to vary the location of the correct answer in the array. This array can be placed on the students' communication system.

- **Pull-off -** Some students have difficulty pointing but may be able to make a selection when the responses are attached to a page. The array of four options is used, but the student pulls the correct response.

- **Eye gaze -** Students who do not have the motor skills to point, but have vision, may be able to indicate the response by looking at the correct option. The array can be attached to each corner of a piece of see-through plexiglass (available from most hardware stores). By looking through the plexiglass, the teacher can see where the student focuses his or her eyes to indicate the answer.

- **Say or Type -** Some students can verbalize the correct answer. This answer may be given after viewing an array of options or by generating the answer when asked a question. Other students may be able to generate the answer by typing a response. Saying or typing the answer provides students with the most flexibility to describe what they know.

- **Show -** Some learning can be demonstrating through showing the answer. The student may be able to indicate the area of the rectangle by moving his or her hand across the shape. Or, a student may answer a comprehension question by pantomiming the answer.

- **Write or type on computer -** Sometimes the student may be able to write the answer, for example, by writing the correct number in an equation or writing the name of the main character in a story.

- **Use material from the lesson -** Students may be able to show the correct math answer by using a number card or plastic numbers or with other manipulatives. Similarly, in language arts, the student may use a picture on the page in the book or prop that is used with a story to answer a comprehension question. Remember: the response mode needs to be something students can do without assistance once they learn the material.

We are indebted to the work of the National Center and State Collaborative for the contents contained in this document. Please see NCSC's Instructional Guide for further information.

Case Studies of Planning and Instruction for

Students with Significant Disabilities

These case studies were written by educators who created the resources and field tested them with teachers and students in schools across the United States. They were then adapted to Louisiana standards and curricula in both English language arts and mathematics. While providing a path through the resources available on the Louisiana Believes website, each case study gives examples of how the resources might apply to students of varying abilities. The case studies described here are fictitious, but based on composites of students who participated in these field tests. Any similarity of a case study to an actual student is purely coincidental.

The 21st century has created the need for all students to leave school with higher levels of academic proficiency than prior generations have had to achieve. Students with significant cognitive disabilities also need the opportunity to prepare for a world where they can access and understand text, use mathematical problem solving, and engage in other academic expectations. Teaching state standards to students who participate in alternate assessments means teachers create educational opportunities for students to learn the content of the assigned grade level. While addressing this same content, differential expectations for achievement are set by prioritizing and simplifying the content and using adaptations for students with significant disabilities to learn the same concepts. The Louisiana Believes resources helps teachers create lesson plans that align with state standards.

Individualization will always be an important component of special education. The case studies offer examples of how to take the resources and make them responsive to individual student's current level of functioning. Through high expectations and individualization, teachers can help more students meet the higher academic outcomes needed to function in today's world.

We are indebted to the work of Browder, D., Wakeman, S., & Flowers, C. (2016). How to teach state standards to students who take alternate assessments. *Minneapolis, MN: University of Minnesota, National Center and State Collaborative.*

Case Studies of Planning and Instruction for

Students with Significant Disabilities

Student Background: Liz is a 15-year-old entering the 9th grade. She has Angelman Syndrome, no speech, and walks with difficulty in balance. She has a severe intellectual disability. Liz's strength is her social skills. She will seek out interaction through walking to someone, showing materials, and vocalizing a calling sound. Liz has emerging literacy and numeracy skills. Neither was emphasized in her school career to date, so she is entering high school with a minimal foundation in academics. Liz has only done math embedded in a daily routine like finding three cups to set a table. She can put one cup with one plate through one-to-one correspondence.

High-Quality Planning and Instruction: Mr. Gomez teaches high school Algebra to Liz. Mr. Gomez wants to find a way to make writing mathematical equations meaningful for her given her limited numeracy skills. He begins with the Eureka lesson used for all students: Algebra 1, Module 1, Lesson 25. In the second exercise of the Eureka lesson, equation formation is taught using the real-world context of work at a printing press and provides a suggested goal for building equations to model simple arithmetic operations. To employ more readily-accessible manipulatives, Mr. Gomez alters the exercise to a vocational activity of working at a hardware store with bags and bolts. Using the crosswalk documents, he identifies the best Louisiana Connector associated with the Louisiana Student Standard.

Louisiana Student Standard	Louisiana Connector
A1: A-CED.A.1 Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear, quadratic, and exponential functions.*	**LC.A1: A-CED.A.1** Translate a real-world problem into a one variable linear equation.

With the concrete objective of "translate a real-world problem into a one variable linear equation" in place, Mr. Gomez thinks about the ways in which Liz will be able to both learn the content and skills, as well as demonstrate mastery. He finds the instructional Student Response Mode guide on the Louisiana Believes website which guides his decisions about how Liz will show what she knows during the academic lesson. Mr. Gomez decides that for a student with emerging skills like Liz, he will begin with limited options and have her make selections from physical manipulatives.

He tells Liz that her job is to set up bags of some number of bolts by evenly distributing the total number of bolts to five different bags. In the initial round, he writes (5b) for five bags of bolts. The b means they do not know how many bolts go in each bag yet. Liz knows she has a total of 25 bolts to evenly distribute to five bags. He has Liz help to create the equation by selecting numbers to put on the equation: $5b = 25$.

Mr. Gomez sets up the task of getting the bolts ready to distribute into five different bags. Liz can count with one-to-one correspondence, so Mr. Gomez uses a large number line to help Liz keep track of how many bolts she's distributed, ensuring she uses all 25 bolts. Liz puts a bolt in each of the five bags, using the number line to help

her count the total number of bolts distributed, and she circles the last number counted after giving each bag exactly one bolt (i.e., she circles the number 5 to represent having distributed five bolts total). Liz continues to distribute the bolts one at a time while Mr. Gomez ensures she is utilizing the number line to keep count. When Liz finishes distributing all 25 bolts, Mr. Gomez asks Liz to tell him how many bolts went into each bag. Mr. Gomez then asks Liz to use the number line to defend her answer that each bag received five bolts. Finally, Mr. Gomez brings Liz back to the equation she wrote to connect the concrete activity to solving the equation: If $5b = 25$, then $b = 5$. Moving between the concrete activity of distributing bolts to the abstractness of both the number line and the equation that models the situation, connecting all three helps to bridge Liz's emerging numeracy understandings and skills to the expectation of the Louisiana Connector.

Mr. Gomez can repeat this process changing the number of bolts, the number of bags, or both, allowing for Liz's understanding of how equations can be used to model and solve real-world problems. He can ask Liz to select from various cards – each with either a number, a variable, or a symbol on it – in order to engage her more in the process of creating the equation. He can increase the complexity of the problem Liz is trying to solve by asking, "If the store can only sell bags of 5 bolts but has a total of 42 bolts, how many bags can they sell?" Asking this question when the numerical answer to the equation is not a whole number will force Liz to think more deeply about the problem, connecting the need for the algebraic skills to solving real-world problems. In later lessons, Mr. Gomez can alter the way he presents the problem to lead Liz to writing inequalities, such as, "If the store can only sell bags of 5 bolts but has a total 63 bolts, what is the maximum number of bags the store can sell?"

With the right planning and guidance, Liz is able to write a mathematical equation in the context of a real-world problem, all the while increasing her overall numeracy and understanding of the four operations. This mirrors the work of other 9th grade students and provides Liz with access and opportunities for mastery through differentiated materials and scaffolding.

Case Studies of Planning and Instruction for

Students with Significant Disabilities

Student Background: Jerome is starting the 8th grade at age 13. Jerome loves computers and has a tablet that he uses to communicate. He knows about 30 symbols that relate to social, academic, and personal needs. He can find the right page on his tablet to initiate a communication (e.g., "Let's Talk," "My Personal Needs," "Math Class"). Jerome is eligible for participation in the LEAP Connect due to a Traumatic Brain Injury; he is also paraplegic and uses a wheelchair. He performs best with a touch screen and does not manipulate objects well. He also can use his eyes to choose between symbols or objects. He does not speak. Jerome did not receive reading instruction when he was a child. His IEP includes trying an adapted beginning reading program with him this year that will also include some writing using a software program that involves clicking and selecting words. Jerome is a member of the middle school concert band. He uses his touch screen to activate music loops that provide background rhythm. Jerome is always highly motivated if a lesson has a musical component.

High-Quality Planning and Instruction: Ms. Johnson is the middle school teacher for Jerome. In her school, the special education teachers specialize in teaching either English language arts or mathematics. Ms. Johnson is the English language arts teacher. The regular classroom is currently studying the Guidebook Unit on the short story version of "Flowers for Algernon". All students are working toward identifying the theme of the story and summarizing the text. Ms. Johnson consults the crosswalks to determine which content and skills are central to the Louisiana Student Standard.

Louisiana Student Standard	Louisiana Connector
RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	**LC.RL.8.2a** Determine the theme or central idea of a text. **LC.RL.8.2b** Analyze the development of the theme or central idea over the course of the text including its relationship to the characters, setting and plot. **LC.RL.8.2c** Create an objective summary of a text.

Recognizing Jerome's love for music, Ms. Johnson chose to introduce the idea of "theme" with songs on the previous day of instruction. During the lesson, Jerome listened to clips of the lyrics of four songs to determine the underlying meaning. She asked Jerome, "What is the artist trying to teach us about life?" Ms. Johnson had brightly colored cards with general themes – such as love, loss, triumph – written. As Jerome listened to the music, he pointed to the card that best suited the theme. Satisfied with Jerome's grasp on theme, she has planned to move to understanding the theme of a text for today's lesson. Given Jerome's current level of reading performance, Ms. Johnson creates an adapted version of the story to simplify and abbreviate the text. Ms. Johnson also refers to the Essential Elements Card for possibilities in developing other, appropriate instructional strategies for this lesson on describing the central message.

In previous lessons, Ms. Johnson has used charts to help Jerome understand sequencing and character traits. This visual has proven to be successful. Ms. Johnson will locate pictures to illustrate scenes that determine important themes in "Flowers for Algernon" (e.g., white mouse in maze, Charlie with doctors, Algernon's grave, Charlie's former coworkers, ink blot test). She will then support Jerome in choosing a phrase for the theme of

"Flowers for Algernon" by listing some possible themes as found in the Lesson 24 Guidebook notes (e.g., intelligence, friendship/relationships, medical experiments, belonging/being normal, treatment of those with learning disabilities). Jerome will then select pictures that support the theme using short phrases activated using text-to-speech features. Once the chart is complete, Ms. Johnson will reiterate to Jerome that he has located relevant evidence from "Flowers for Algernon" which helped develop his identified theme. Once Ms. Johnson is satisfied with Jerome's ability to identify theme, she will think about how to show the development of this theme over the course of the text.

She will then turn to focus on the Louisiana Connector related to summarization. She has some clear ideas about how move forward with the planning of this lesson. She plans to model summarization by reading the short story aloud and then, periodically, stopping and summarizing what was just read. At the end of the story, the teacher will provide another summary of the entire text. As Jerome's understanding progresses, she will also plan to vary her approach by using a variety of ways to read the text aloud: sometimes she will read it, sometimes other students will read it, and sometimes she will prompt Jerome to use text-to-speech technology. She will also increase Jerome's opportunities for demonstrating his understanding of the text, moving from non-verbal gestures to choosing between two summary sentences to creating his own synopsis statements. She will create a page for Jerome's computer tablet that can be used across texts and chapters to summarize story elements including the setting, characters, problem, and resolution.