PURPOSE

The Assessment Guide for LEAP Connect is designed to assist Louisiana educators in understanding the LEAP Connect assessments in English language arts (ELA), mathematics, and science for grades 6-8.

Introduction

Louisiana is building an educational system that ensures all students are ready for the next level of study by building knowledge of the world, accessing meaningful texts, expressing ideas, and solving complex problems. Through this, Louisiana is creating an equitable system for students with significant cognitive disabilities. Over the past few years, much progress has been made to deliver on this belief including:

- the Louisiana Connectors (LCs) for Students with Significant Cognitive Disabilities in English language arts (ELA), mathematics, and science that establish high expectations for students with significant cognitive disabilities, with instructional resources for educators;
- alternate assessments (LEAP Connect) in ELA, mathematics, and science aligned to the LCs to measure student progress; and
- an established graduation pathway to a high school diploma for students assessed on the alternate assessments.

Federal law requires states to administer annual assessments to all students, including students with significant cognitive disabilities, to measure progress towards challenging academic content standards. The LEAP 2025 assessments measure student proficiency in the content and skills detailed by the Louisiana Student Standards (LSS), and the LEAP Connect assessments measure student proficiency in the content and skills detailed by the Louisiana Connectors (LCs) for Students with Significant Cognitive Disabilities. The LCs represent the “big ideas” of the content and skills found in the LSS. The LEAP Connect format allows students to participate in academic assessments that are sensitive to measuring progress in their learning (see R.S.17:24.4(F)(3) and R.S.17:183.1-17:183.3).

Participation Requirements

To be eligible to participate in the LEAP Connect assessments, an IEP team must verify that the student has a disability which significantly impacts cognitive functioning and meets the criteria outlined in Bulletin 1530 §505 (refer to Alternate Assessment Participation Criteria for additional information). Eligible students will take the LEAP Connect assessments for ELA and mathematics each year in grades 6-8 and science in grade 8, as required by Sections 1111(b)(1)(E) and 8401 of the Elementary and Secondary Education Act of 1965.
ASSESSMENT DESIGN
Standards, Connectors, and Complexity Levels
The LCs for ELA, mathematics, and science for kindergarten through high school focus on the “big ideas” found in the LSS for ELA, mathematics, and science. The LCs provide developmentally appropriate and challenging content to guide curriculum and assessment development for students with significant cognitive disabilities. The LEAP Connect assessments align to the ELA, mathematics, and science LCs, which identify the:

- most salient grade-level academic content found in the LSS for ELA, mathematics, and science; and
- core content knowledge and skills needed at each grade to provide success at the next.

Instructional resources developed for the LCs include Essential Elements Cards, Science Component Cards, Additional Resources, and Trainings and Overview, each briefly described in the Resources section of this document.

The assessments include items with multiple levels of complexity and varying degrees of scaffolds and supports to provide opportunities for students to show what they know and can do. The LEAP Connect assessment items each represent one of four levels of complexity (Tiers 1-4), designed to follow instructional practices. Tier 1 and Tier 2 questions reflect the higher level of support needed when students begin to learn a new skill or acquire new knowledge. Tier 3 and Tier 4 questions reflect the lower level of support needed as students learn and develop mastery of that skill or knowledge (see Table 1). LEAP Connect Science Levels of Complexity will be added to the assessment guides in the winter of 2019-2020.

### Table 1. LEAP Connect Levels of Complexity

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Tier 4</th>
</tr>
</thead>
</table>
| English Language Arts | • short text with repeated ideas  
• simple vocabulary words  
• provides a specific “listen for” statement related to the item | • text with straightforward ideas  
• provides a brief description of the item topic and simple definitions of terms  
• provides a “listen for” statement related to the assessed skill | • text with clear ideas  
• provides some detail about the item topic and definitions of terms  
• provides statement reminding students what the item is about | • text with detailed and implied ideas  
• provides statement reminding students what the item is about |
| Mathematics      | • supports use of hands-on concrete materials  
• successive model that guides one step at a time  
• simplified language and/or visual representations  
• few data points  
• increase magnitude of numbers | • successive model that guides one step at a time  
• simplified language and/or visual representations  
• few data points  
• increase magnitude of numbers | • model that shows solution to a similar problem  
• simplified language  
• additional number of data points  
• further increase in magnitude of numbers | • statement reminding student what the item is about |
### Description of Item Types

The LEAP Connect assessments include several types of items.

- **Selected-response (SR)** items are multiple-choice questions in which a student selects one correct answer from two or three options.
- **Multiple-part, selected-response (MPSR)** items (ELA only) are multiple-choice questions clustered together in two or three parts and connected to a single LC. For each item, the student selects one correct answer from two or three options. Each item in the cluster is worth 1 point; the overall cluster is worth more than one point.
- **Constructed response (CR)** items differ in design and purpose according to the content or skill being assessed.
  - In ELA, students will produce a CR response to a writing prompt. The ELA writing CR is scored by professionally trained scorers using a 3-dimensional rubric. Examples of the ELA Writing CR rubrics are found in Appendix C.
  - In mathematics, students produce a response to a mathematics problem.
  - In science, students produce a response to a science question.

### Reporting

Student performance on the LEAP Connect ELA and mathematics assessments is reported by achievement level and overall score. **Achievement Level Descriptors (ALDs)** are also included in the student-level reports. The ALDs describe the knowledge and skills students generally demonstrate at each level. The **LEAP Connect Interpretive Guide** and the **Parent Guide to the LEAP Connect Student Reports** describe the ELA and mathematics tests so that school systems, school administrators, teachers, parents, and the general public will be able to use the results effectively. Science reporting information will be included in this guide after standard setting in the summer of 2021.
LEAP Connect ELA Assessment Design

The LEAP Connect ELA assessments measure reading comprehension of age- and grade-appropriate literary and informational texts, vocabulary, and writing. The ELA assessment includes selected-response (SR) and constructed-response (CR) items. Refer to Description of Item Types in this document for more information.

The LEAP Connect ELA assessments each contain four sessions. The first two sessions assess reading and include literary and informational passages and vocabulary. The third session begins with four SR items that assess a variety of writing skills, one at each tier, and includes a set of SR items related to narrative and informational (i.e., argument) writing. The fourth session includes a CR item intended to produce informational writing. Table 2 summarizes the sessions for grades 6-8 by the types of passages the students will read and the types, points, and numbers of items the students will answer.

Table 2. LEAP Connect ELA Assessment Design

<table>
<thead>
<tr>
<th>Grade</th>
<th>Session 1: Reading</th>
<th>Session 2: Reading</th>
<th>Session 3: Writing</th>
<th>Session 4: Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>literary and informational reading passages and associated reading questions</td>
<td></td>
<td>writing questions</td>
<td>writing task</td>
</tr>
<tr>
<td>Type (Number) of Passages; Type (Number) of Questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-8</td>
<td>Informational (2) and Literary (1); SR (16-17)</td>
<td>Literary (1) and Informational (1); SR (12-16)</td>
<td>N/A; SR (9-10)</td>
<td>Informational (1); CR (1)</td>
</tr>
</tbody>
</table>

Reading items measure students’ reading comprehension, decoding skills, and vocabulary understanding, with both literary and informational texts in grade-appropriate contexts.

- Literature questions focus on beginning comprehension skills (such as describing characters in a story) as well as more advanced comprehension skills (such as analyzing the development of a theme).
- Informational questions focus on, for example, identifying the main idea as well as using information in charts and diagrams.
- In grades 6-8, one of the LCs at each grade requires evaluation of comprehension across two passages. These skills are measured using “paired passage sets.” All paired passages are informational texts.

Writing items assess students’ writing skills development and focus on different types of writing—narrative, explanatory, and argument—at different grade levels. Grades 6-8 focus on explanatory writing measured by SR items (Tier 1), narrative writing measured by SR items (Tier 2), and explanatory writing measured by a CR item (Tier 2).

Table 3 provides information on the percent of representation of each ELA category on the test.

Table 3. Percent Representation Per ELA Domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Reading Literature</th>
<th>Reading Informational</th>
<th>Reading Vocabulary</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 6-8</td>
<td>20%</td>
<td>40%</td>
<td>10%</td>
<td>30%</td>
</tr>
</tbody>
</table>

LEAP Connect Mathematics Assessment Design

The LEAP Connect mathematics assessment in the middle grades focus on problem solving and reasoning. The tests are divided into two sessions (see Table 4).
Table 4. LEAP Connect Mathematics Design

<table>
<thead>
<tr>
<th>Session</th>
<th>Session 1</th>
<th>Session 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>mathematics questions and completion items; each worth 1 point</td>
<td></td>
</tr>
<tr>
<td>Type (Number) of Questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades 6-7</td>
<td>SR (20)</td>
<td>SR (20)</td>
</tr>
<tr>
<td>Grade 8</td>
<td>SR (19), CR (1)</td>
<td>SR (19-20), CR (1)</td>
</tr>
</tbody>
</table>

Table 5 provides information on the percent of representation of each mathematics category on the test.

Table 5. Percent Representation Per Mathematics Domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Geometry</th>
<th>Ratio and Proportions</th>
<th>Expressions and Equations</th>
<th>The Number System</th>
<th>Statistics and Probability</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 6</td>
<td>10%</td>
<td>30%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td>-</td>
</tr>
<tr>
<td>Grade 7</td>
<td>20%</td>
<td>40%</td>
<td>10%</td>
<td>20%</td>
<td>10%</td>
<td>-</td>
</tr>
<tr>
<td>Grade 8</td>
<td>30%</td>
<td>-</td>
<td>20%</td>
<td>10%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

LEAP Connect Science Field Test Design
The tests are divided into two sessions which both include SR and CR items.

Table 6. LEAP Connect Science Field Test Design

<table>
<thead>
<tr>
<th>Session</th>
<th>Session 1</th>
<th>Session 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>science questions and completion items; each worth 1 point</td>
<td></td>
</tr>
<tr>
<td>Type (Number) of Questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8</td>
<td>SR (13-14), CR (1-2)</td>
<td>SR (13-14), CR (1-2)</td>
</tr>
</tbody>
</table>

Table 7 provides information on the percent of representation of each science category on the test (winter 2019-2020).

Table 7. Percent Representation Per Science Domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Earth and Space Science</th>
<th>Life Science</th>
<th>Physical Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 8</td>
<td>30%</td>
<td>40%</td>
<td>30%</td>
</tr>
</tbody>
</table>
TEST ADMINISTRATION

The LEAP Connect ELA, mathematics, and science assessments are administered as computer-based tests (CBT) in a one-to-one setting. The test administrator will use the online test platform, the Test Administrator Manual, Directions for Test Administration, and reference materials for grade-specific item presentation and response collection to prepare for and administer the test. All passages, items, and response options are designed to be read to the students by the testing platform or the test administrator.

Tests are untimed and allow for breaks between questions or sessions. The test administrator may pause the test as needed to best accommodate the student.

Administration Schedule
The LEAP Connect testing window is February 3-March 13, 2020.

LEAP Connect Test Administration

The student or the test administrator will record the student’s answers to all questions into the online testing system. Answering the ELA writing CR requires entering text into the response boxes; all other items require the selection of an option with the pointer tool.

The LEAP Connect assessments include accessibility features for all students who take the test.

- Students should respond to SR, MPSR, and CR items based on their preferred mode of communication (e.g., eye gaze, assistive technology, point to a picture, etc.).
- Nearly all the mathematics items on the LEAP Connect assessments contain visual stimuli to assist students with determining an answer.

The assessment items indicate when students may use calculators. Any student with an IEP accommodation for calculator use may a calculator for every assessment item. While an online calculator is provided, students may use the handheld calculator they typically use during instruction on the mathematics test.
Online tools provide additional accessibility for all students. The tools allow a student to select answer choices, “mark” items, eliminate answer options, take notes, enlarge the item, guide the reading of a text or an item line by line, and use a calculator. A help tool is also featured to assist students as they use the online system.

- Pointer tool
- Sticky Note tool
- Calculator
- Highlighter tool
- Magnifying tool
- Help Tool
- Cross-Off tool
- Line Guide

All students should work through the Online Tools Training (available in INSIGHT or here using the Chrome browser) to practice using the online tools so they are well prepared to navigate the online testing system. Practice DTA (Directions for Test Administration) and Reference Materials are available for both content areas in the DRC INSIGHT Portal (eDIRECT) and in the LDOE library.

Student Response Check
A Student Response Check (SRC), three content-neutral items administered prior to testing, allows the observation of the student’s mode of response. The student need not respond correctly to any of the items; rather, the purpose is to determine whether the student can indicate a response using his or her preferred mode of communication and the test administrator can clearly identify the student’s response to each item. If the student’s response is not observable by the test administrator, the test administrator cannot enter the student’s response in DRC INSIGHT. Teachers and test administrators may access the SRC through INSIGHT or through the LEAP Connect Online Tools Training under the link ‘Student Response Check.’

Vocabulary Lists for ASL and AT/AAC Devices
Vocabulary lists are included in Appendix D for those students who use alternative modes of communication. These words should be reviewed and any new terms introduced to students so that they become part of their routine vocabulary.

Permitted Testing Materials
Students must be permitted to use scratch paper and pencils.

Each test comes with reference materials that contain visual stimuli, formulas, a list of manipulatives, and the answer options for each test question. Some of the reference materials will need to be copied and cut out for student use. Some of the materials will be used as stimuli for CR items or to assist with answering SR items. The Directions for Test Administration (DTA) contains scripted instructions for the test administrator to provide specific materials to the student. The answer options may be copied and used with eye gaze boards as needed. All reference materials must be securely destroyed after testing has completed, including used scratch paper.
RESOURCES

Assessment Guidance Library
- **Webinars and Presentations**: webinars about administering the LEAP Connect and using LEAP Connect ELA Sample CR items
- Sample ELA Constructed Response: samples of **Constructed Response Directions for Administration** and **Constructed Response Stimuli**
- Sample Mathematics Constructed Response: samples of **Constructed Response Directions for Administration** and **Sample Mathematics Reference Materials**

Assessment Library
- **Alternate Assessment Eligibility Criteria**: provides the participation requirements for alternate assessment
- **LEAP Connect iGuide**: provides school systems with information to better understand and use the results of the assessments
- **Achievement Level Descriptors**: descriptions of the knowledge, skills, and processes that students demonstrate with relative consistency and accuracy at each level of achievement

DRC INSIGHT Portal (eDIRECT): includes access to tutorials, manuals, and user guides
- **Online Tools Training**: allows students to become familiar with the tools available in the online testing platform

Contact Us
- **AskLDOE** electronic ticket system
- **assessment@la.gov** for assessment questions
- **classroomsupporttoolbox@la.gov** for curriculum and instruction questions

Newsroom: Offers archive copies of newsletters including the LDOE Weekly School System Newsletter and the Teacher Leader Newsletter

Students with Significant Cognitive Disabilities
- **Adapting Lesson Plans** (in Additional Resources): serve as templates for adapting whole class lesson plans to individualized instruction
- **ELA Guidebooks 2.0**: provides a whole-class curriculum focusing on learning grounded in a collection of texts and includes modifications
- **ELA Guidebooks 2.0 Diverse Learner Guide**: contains information about using the ELA Guidebooks with diverse learners
- **Essential Elements Cards**: serve as a primer for differentiating instruction in ELA and mathematics by breaking down connectors into knowledge and skills; and suggesting instructional strategies, possible supports, and scaffolds for student learning
- **Parent Guide to LEAP Connect**: helps parents understand the LEAP Connect assessment, available in Arabic, Spanish, and Vietnamese
- **Parent Guide to LEAP Connect Score Reports**: helps parents understand the LEAP Connect student reports, available in Arabic, Spanish, and Vietnamese
- **Science Component Cards**: contain additional guidance for teaching the science connectors
- **Louisiana Connectors for Students with Significant Cognitive Disabilities** are aligned with Louisiana Student Standards and represent the most salient grade-level, core academic content in English language arts, mathematics, and science
- **Student Response Modes** (in Additional Resources): support teachers in identifying the best way for any student to demonstrate understanding
- **Case Studies**: provide models for how teachers and specialists may best modify objectives, assessments, activities, and materials
APPENDIX A: ACHIEVEMENT LEVELS
LEAP Connect scale scores are used to assign a student’s achievement in ELA, mathematics, and science (fall 2021) to one of four levels.

Table 8. Achievement Level Score Ranges

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language Arts</td>
<td>1253-1290</td>
<td>1240-1252</td>
<td>1231-1239</td>
<td>1200-1230</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1249-1290</td>
<td>1240-1248</td>
<td>1234-1239</td>
<td>1200-1233</td>
</tr>
<tr>
<td><strong>Grade 7</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language Arts</td>
<td>1255-1290</td>
<td>1240-1254</td>
<td>1236-1239</td>
<td>1200-1235</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1254-1290</td>
<td>1240-1253</td>
<td>1232-1239</td>
<td>1200-1231</td>
</tr>
<tr>
<td><strong>Grade 8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language Arts</td>
<td>1250-1290</td>
<td>1240-1249</td>
<td>1230-1239</td>
<td>1200-1229</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1249-1290</td>
<td>1240-1248</td>
<td>1234-1239</td>
<td>1200-1233</td>
</tr>
<tr>
<td>Science</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>
APPENDIX B: SAMPLE TEST ITEMS

Reading Sample Test Items

LEAP Connect Reading—Informational Text Grade 6 Selected Response

Content Assessed: Reading—Informational Texts
Standard: LC.RI.6.8b
Complexity Level: Tier 2
Answer Key: C

We are going to read an informational text about a man named Mark Twain. He lived a long time ago and wrote books. After we read, you will be asked a question about an argument the author makes.

The Life and Works of Mark Twain

Mark Twain was an American writer. He was born in 1835.

What argument did the author make about Mark Twain?

A

Mark Twain was a famous scientist.

B

Mark Twain lived in Missouri.

C

Mark Twain was a talented author.
LEAP Connect Reading—Literature Grade 7 Selected Response (Does not reflect the test platform)

Content Assessed: Reading—Literature Text
Standard: LC.RL.7.4a
Complexity Level: Tier 2
Answer Key: C

We read a story about a boy named Dylan who writes a journal about his friends. We are going to read part of the story again. Listen for clues that tell you what the word exaggerating means.

Tuesday

Playing basketball was exhausting. I am tired, but I don’t mind. I scored three times! Mason and Carlos scored points too. Carlos said he scored 100 points. But I knew he was exaggerating. Actually, Carlos only scored 10 points.

What does the word exaggerating mean in this sentence?

1. working hard at a task
2. laughing with friends
3. saying more than the truth
**Content:** Reading—Informational Text  
**Standard:** LC.L.8.6a  
**Complexity:** Tier 3  
**Answer Key:** B

We are going to read an informational text about seabirds. After we read, you will be asked a question about the conclusion that a seabird is a good hunter.

**Fishing with Wings**

![Seabird](image)

**Seabirds**
Seabirds fish for their dinner in the salty waters of the ocean. Seabirds are built to catch fish.

Some seabirds drop from the sky. They plunge into the water to catch their dinner. Some seabirds swim underwater. They dive deep down into the water to catch their dinner.

There are plenty of places for a seabird to fish. That's

---

**What is another sentence from the text that tells that a seabird is a good hunter?**

*Options*

- It has a long neck and a dark body.
- It can dive as deep as 150 feet into the ocean to find prey.
- That's because more than 70% of Earth is covered by oceans.
Content Assessed: Expository Writing
Standard: LC.W.7.4
Complexity Level: Tier 2

You are going to write an essay that is about the cause and effect of what might happen because someone is tired.

Cause-and-effect means that one event, the cause, makes the other event, the effect, happen. One example of cause and effect is when you eat fruits and vegetables everyday helps you be strong and healthy. The effect is that you get strong and healthy. In your essay, you will write about what might happen because someone is tired.

In this essay, I will write about the cause and effect of

Because someone is tired

This can be described

In conclusion,
Content Assessed: Ratios and Proportional Relationships
Standard: LC.6.RP.A3
Complexity Level: Tier 3
Answer Key: C

This item is about solving a problem using a ratio.

June learned 6 new vocabulary words for every chapter she read. This is a ratio of 6 to 1.

\[ \frac{6}{1} \]

June learned 60 new vocabulary words.

How many chapters did June have to read to learn 60 new vocabulary words?

- (a) 3 chapters
- (b) 6 chapters
- (c) 10 chapters
This item is about solving a problem using a ratio.

The students in Ms. Victor’s class collected books.

There are three boxes.

Each box holds 2 books.

How many total books did the students put in to fill the 3 boxes?

Answer Key: C
LEAP Connect Math Grade 6 Selected Response

**Content Assessed:** The Number System  
**Standard:** LC.6.NS.C.6d  
**Complexity Level:** Tier 2  
**Answer Key:** B

This item is about locating positive and negative numbers on a number line.

This is a number line.

The numbers to the right of 0 are positive numbers.

The numbers to the left of 0 are negative numbers. The symbol in front of these numbers means they are negative.

This is 2 on the number line.

This is another number line.

What is the location of Point A on the number line?

- -5  
- -3  
- 3
Content Assessed: Geometry
Standard: LC.7.G.B.4
Complexity Level: Tier 2
Answer Key: C

This item is about finding the area of a circle.

This is a circle.

\[ r = 5 \text{ m} \]

This is the formula for finding the area of a circle.

\[ \text{Area} = 3.14 \times r \times r \]

A letter can stand for a number in an equation.

The letter \( r \) in this equation stands for the radius. The radius of this circle is 5 meters.

Which equation shows how to find the area of the circle?

- Area = 3.14 \( \times \) 5 = 15.70 sq m
- Area = 3.14 + 5 + 5 = 13.14 sq m
- Area = 3.14 \( \times \) 5 \( \times \) 5 = 78.50 sq m
Content Assessed: The Number System
Standard: LC.8.NS.A.2
Complexity Level: Tier 3
Answer Key: B

This item is about locating numbers on a number line.

This is $\sqrt{59}$.

The value of $\sqrt{59}$ is about 7.68.

Use the number 7.68 to find the approximate location of $\sqrt{59}$ on the number line.

The approximate location of $\sqrt{59}$ is between the numbers 7 and 8 on the number line.

The value of $\sqrt{40}$ is about 6.32.

This is another number line. Each letter stands for a point on the number line.

Use the number 6.32 to find the approximate location of $\sqrt{40}$ on the number line.

Which point shows the approximate location of $\sqrt{40}$ on the number line?

- point A
- point B
- point C
Science Sample Test Items

LEAP Connect Science Grade 8 Constructed Response (Does not reflect the test platform)

**Content Assessed:** Physical Science

**Standard:** LC.8.MS.PS1.3a

**Complexity Level:** Tier 3

This item is about natural resources and man-made resources.

Natural resources are found in nature and useful to people. Examples of natural resources are oil and wool.

Man-made resources are made by people. Examples of man-made resources are paper and fabric.

These are resources.

The left side is labeled “Natural Resources.” Place the resources that are found in nature onto this side of the chart.

The right side is labeled “Man-made Resources.” Place the resources that are made by people onto this side of the chart.

**Rubric**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student correctly sorts three out of three resources.</td>
</tr>
<tr>
<td>0</td>
<td>Student does not correctly sort three out of three resources.</td>
</tr>
</tbody>
</table>

This is a chart.
Content Assessed: Physical Science  
Standard: LC.8.MS.PS3.3a  
Complexity Level: Tier 3  
Answer Key: C

This item is about thermal energy.  
A student in a science class conducted a heat loss experiment using a glass beaker, an insulated thermos, and a foam cup.

- The same volume of water was placed into each container.
- The starting temperature of the water in each container was 83°C.
- After 30 minutes, the student took the temperature of the water in each container.

The temperatures are shown in the data table.

<table>
<thead>
<tr>
<th>Container</th>
<th>Final Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass beaker</td>
<td>24.7</td>
</tr>
<tr>
<td>Insulated thermos</td>
<td>81.9</td>
</tr>
<tr>
<td>Foam cup</td>
<td>53.0</td>
</tr>
</tbody>
</table>

Which container kept the temperature of the water the warmest?  
A. glass beaker  
B. insulated thermos  
C. foam cup
Content Assessed: Life Science
Standard: LC.8.MS.LS3.1a
Complexity Level: Tier 2
Answer Key: A

This item is about parents and offspring. Traits are characteristics passed from parents to offspring.

Which shows how parents and offspring may have different traits?

- **Dad** blue eyes
- **Child** brown eyes
- **Mom** brown eyes

A. [Diagram showing a child with brown eyes]

B. [Diagram showing a sequence of stages of growth]

C. [Diagram showing a human body]
LEAP Connect Science Grade 8 Constructed Response (Does not reflect the test platform)

**Content Assessed:** Life Science  
**Standard:** LC.8.MS.LS4.3a  
**Complexity Level:** Tier 2

This item is about how animals develop and grow. An embryo is the earliest stage of development of an unborn or unhatched animal.  
For example, a pig starts life as an embryo and then is born and grows as a piglet.

**Stages of Pig Development**

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
</tr>
</thead>
</table>

Other animals begin life with similar stages of embryo development.  
This is a chart to show stages of a chicken’s development.  
The first stage shows the Stage 1 embryo development of a chicken. It looks similar to the Stage 1 embryo development of the pig.

**Stages of Chicken Development**

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
</tr>
</thead>
</table>

These are pictures to use to complete the chart of a chicken’s development.

Complete the chart by placing the stages of chicken development in the correct order from Stage 2 to Stage 4.

**Rubric**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student correctly places exactly 3 pictures of the chicken development stages on the chart in the correct order.</td>
</tr>
<tr>
<td>0</td>
<td>Student does not correctly place exactly 3 pictures of the chicken development stages on the chart in the correct order.</td>
</tr>
</tbody>
</table>
Content Assessed: Life Science
Standard: LC.8.MS.PS1.6b
Complexity Level: Tier 2

This is the second item of a two-part item. Students may not return to the previous item.

This item is about chemical reactions. Some chemical reactions release heat or light. This is a chart.

### Chemical Reactions

<table>
<thead>
<tr>
<th>Release Heat</th>
<th>Release Light</th>
</tr>
</thead>
</table>

These are chemical reactions.

- Glow sticks
- Hand warmer

The left side of the chart is labeled “Release Heat.” Place the chemical reaction that releases heat onto this side of the chart.

The right side of the chart is labeled “Release Light.” Place the chemical reaction that releases light onto this side of the chart.

**Rubric**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student correctly places the picture of the hand warmer under the “Release Heat” category and the picture of glow sticks under the “Release Light” category.</td>
</tr>
<tr>
<td>0</td>
<td>Student does not correctly place the picture of the hand warmer under the “Release Heat” category and the picture of glow sticks under the “Release Light” category.</td>
</tr>
</tbody>
</table>
LEAP Connect Science Grade 8 Selected Response (Does not reflect the test platform)

Content Assessed: Life Science
Standard: LC.8.MS.PS1.6b
Complexity Level: Tier 1
Answer Key: B

This is a two-part item. Be sure the student responds to this item before presenting the second item of this three-part item.

This item is about changes. During a physical change, a material may change shape. For example, tearing a piece of paper is a physical change.

During a chemical change, a material may change into a different substance. For example, a new nail becoming rusty.

What type of change is burning wood?
A. physical
B. chemical
This item is about Earth’s history.
Fossils are the remains or traces of organisms from the ancient past.
This is an example of a fossilized fish found in a layer of rock.

Rock layers are usually ordered with the oldest layers on the bottom, and the most recent layers on top.
This is a picture of four periods of Earth’s history.

This is a chart.

**Earth’s History**

<table>
<thead>
<tr>
<th>Oldest</th>
<th>Most Recent</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Fossil Image" /></td>
<td><img src="image2.png" alt="Fossil Image" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Fossil Image" /></td>
<td><img src="image4.png" alt="Fossil Image" /></td>
</tr>
<tr>
<td><img src="image5.png" alt="Fossil Image" /></td>
<td><img src="image6.png" alt="Fossil Image" /></td>
</tr>
</tbody>
</table>

The oldest fossil is shown on the left side of the chart. These are pictures of fossils to use to complete the chart.

Complete the chart by placing the pictures of fossils in the correct order from oldest to most recent on the chart.

**Rubric**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student correctly places exactly 3 pictures of the fossils on the chart in the correct order.</td>
</tr>
<tr>
<td>0</td>
<td>Student does not correctly place exactly 3 pictures of the fossils on the chart in the correct order.</td>
</tr>
</tbody>
</table>
This item is about natural resources.

Natural resources are found in nature and useful to people. Minerals, forests, water, and fertile land are examples of natural resources. Natural resources are unevenly distributed across Earth.

Which human activity contributes to the uneven distribution of natural resources?

A. cutting down trees to make room for towns
B. communicating using language
C. inventing useful tools
### Table 9. Writing Explanatory Rubric Grade 6

<table>
<thead>
<tr>
<th>Rubric Elements</th>
<th>Full Evidence</th>
<th>Partial Evidence</th>
<th>Limited Evidence</th>
<th>No/Unrelated Evidence</th>
</tr>
</thead>
</table>
| **Organization**  | The essay includes at a minimum:  
  • an introduction that states the essay is about two opposing conditions  
  • a body that includes:  
    o one activity for each of the two opposing conditions; and  
    o one activity common to both conditions  
  • a conclusion that states two opposing conditions or summarizes the content  | The essay includes at a minimum:  
  • an introduction that states one activity or topic  
  • a body that relates two conditions with activities  
  • a conclusion that states an activity or the topic  | The essay includes at a minimum some evidence related to the specified topic (i.e., introduction, compare/contrast relationship, or conclusion).  | There is no evidence of organization or the evidence is off topic. |
| **Idea Development**  | The essay includes at a minimum:  
  • three activities, each with relevant details (the same detail may be used for all activities if relevant to each)  | The essay includes at a minimum:  
  • one activity with a relevant detail  | The essay includes at a minimum a detail that describes an activity.  | There is no evidence of idea development or the evidence is off topic. |
| **Conventions**  | The essay includes more than one sentence and at a minimum:  
  • end punctuation for more than one thought unit  
  • one complete sentence with subject-verb agreement  | The essay includes at a minimum:  
  • end punctuation for one thought unit  
  • one complete sentence with or without subject-verb agreement  | The essay includes at a minimum one use of Standard English conventions.  | There is no evidence of Standard English conventions. |
Table 10. Writing Explanatory Rubric Grade 7

<table>
<thead>
<tr>
<th>Rubric Elements</th>
<th>Full Evidence</th>
<th>Partial Evidence</th>
<th>Limited Evidence</th>
<th>No/Unrelated Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• an introduction that states the topic/cause</td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a body that relates the effect to the provided cause</td>
<td>• an introduction that states the topic/cause</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a conclusion that states the essay is about a cause and its effect</td>
<td>• a body that includes an effect that may not relate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to the provided cause</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• a conclusion that states a cause of the effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• an introduction that states the topic/cause</td>
<td>The essay includes at a minimum some evidence related</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a body that relates the effect to the provided cause</td>
<td>to the specified topic (i.e., introduction, cause/effect relationship, or conclusion).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a conclusion that states a cause of the effect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Idea Development</strong></td>
<td>The essay includes at a minimum:</td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a relevant detail to describe the effect</td>
<td>• one effect with no relevant detail</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a relevant detail to describe the effect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• one effect with no relevant detail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conventions</strong></td>
<td>The essay includes more than one sentence and at a minimum:</td>
<td>The essay includes at a minimum:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• end punctuation for more than one thought unit</td>
<td>• end punctuation for one thought unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• one complete sentence with subject-verb agreement</td>
<td>• one complete sentence with or without subject-verb</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>agreement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is no evidence of organization or the evidence is off topic.

There is no evidence of idea development or the evidence is off topic.

There is no evidence of Standard English conventions.
Table 11. Writing Explanatory Rubric Grade 8

<table>
<thead>
<tr>
<th>Rubric Elements</th>
<th>Full Evidence</th>
<th>Partial Evidence</th>
<th>Limited Evidence</th>
<th>No/Unrelated Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>The essay includes at a minimum:</td>
<td>The essay includes at a minimum:</td>
<td>The essay includes at a minimum some evidence related to the specified topic (i.e., introduction, problem/solution relationship, or conclusion).</td>
<td>There is no evidence of organization or the evidence is off topic.</td>
</tr>
<tr>
<td>The essay addresses a specified topic and is organized with a solution related directly to the problem (e.g., problem/solution).</td>
<td>• an introduction that states both parts of the problem</td>
<td>• an introduction that states the problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a body that relates how the solution can be applied to the problem</td>
<td>• one solution that may not relate to the problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a conclusion that states the problem and the solution</td>
<td>• a conclusion that states the problem or the solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Idea Development</strong></td>
<td>The essay includes at a minimum:</td>
<td>The essay includes at a minimum:</td>
<td>The essay includes at a minimum a detail or word that describes the problem or the solution.</td>
<td>There is no evidence of idea development or the evidence is off topic.</td>
</tr>
<tr>
<td>The essay develops a topic, includes details to promote meaning and create clarity.</td>
<td>• a relevant detail to describe the problem</td>
<td>• a relevant detail to describe the problem or the solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a relevant detail to describe the solution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conventions</strong></td>
<td>The essay includes more than one sentence and at a minimum:</td>
<td>The essay includes at a minimum:</td>
<td>The essay includes at a minimum one use of Standard English conventions.</td>
<td>There is no evidence of Standard English conventions.</td>
</tr>
<tr>
<td>The student uses standard English conventions (subject-verb agreement).</td>
<td>• end punctuation for more than one thought unit</td>
<td>• end punctuation for one thought unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• one complete sentence with subject-verb agreement</td>
<td>• one complete sentence with or without subject-verb agreement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12. Mathematics Constructed Response Rubric Example

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student correctly completes task described.</td>
</tr>
<tr>
<td>0</td>
<td>Student does not complete task or completes it incorrectly.</td>
</tr>
</tbody>
</table>
Appendix D: English Language Arts and Mathematics Vocabulary List

The vocabulary lists are for American Sign Language (ASL) translation, object replacement, tactile graphics, word boards or word banks, and AT/AAC devices.

<table>
<thead>
<tr>
<th>ELA</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>author's claim</td>
<td>addition</td>
</tr>
<tr>
<td>cause and effect</td>
<td>fraction</td>
</tr>
<tr>
<td>character</td>
<td>proportional relationship</td>
</tr>
<tr>
<td>claim</td>
<td>rate</td>
</tr>
<tr>
<td>compare</td>
<td>grid</td>
</tr>
<tr>
<td>conclusion</td>
<td>rectangle</td>
</tr>
<tr>
<td>contrast</td>
<td>height</td>
</tr>
<tr>
<td>describe</td>
<td>relationship</td>
</tr>
<tr>
<td>details</td>
<td>less than</td>
</tr>
<tr>
<td>edit</td>
<td>similar</td>
</tr>
<tr>
<td>essay</td>
<td>model</td>
</tr>
<tr>
<td>events</td>
<td>slope</td>
</tr>
<tr>
<td>exclamation point</td>
<td>corresponding</td>
</tr>
<tr>
<td>form</td>
<td>model</td>
</tr>
<tr>
<td>inference</td>
<td>symbol</td>
</tr>
<tr>
<td>introduction</td>
<td>parallel/parallelogram</td>
</tr>
<tr>
<td>main idea</td>
<td>thermometer</td>
</tr>
<tr>
<td>message</td>
<td>unit</td>
</tr>
<tr>
<td>opinion</td>
<td>volume</td>
</tr>
<tr>
<td></td>
<td>weight</td>
</tr>
<tr>
<td></td>
<td>x axis</td>
</tr>
<tr>
<td></td>
<td>y axis</td>
</tr>
</tbody>
</table>
## Appendix E: Update Log

<table>
<thead>
<tr>
<th>Date</th>
<th>Page</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/30/19</td>
<td>All</td>
<td>Added Science Assessment Design Information</td>
</tr>
<tr>
<td>10-18</td>
<td></td>
<td>Added OTT Screenshots in place of ELA and math Sample Items</td>
</tr>
<tr>
<td>19-26</td>
<td></td>
<td>Added Science Sample Items</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>Added Appendix D: English Language Arts and Mathematics Vocabulary List</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>Added Appendix E: Update Log to document and internal links</td>
</tr>
</tbody>
</table>