



Contents

Policy Level Definitions	1
Scale Score Ranges	
Achievement Level Descriptors	
Task Complexity Descriptions	
Science Grade 4 ALDs	
Science Grade 8 ALDs	4
Science High School ALDs	5

Policy Level Definitions

Policy Level Definitions (PLDs) briefly describe the expectations for student performance at each of Louisiana's four achievement levels. The achievement levels are part of Louisiana's cohesive assessment system and indicate a student's ability to demonstrate proficiency on the Louisiana Connectors for Students with Significant Cognitive Disabilities.

The following list identifies the PLDs for the LEAP Connect assessment program.

- Below Goal: A student who performs at below goal level demonstrates a minimal understanding of key
 academic knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities
 when presented with low complexity texts or tasks and will need substantial academic scaffolds and supports
 as the student transitions to the next grade/course and progresses toward inclusive college, career, and
 community opportunities.
- Near Goal: A student who performs at near goal level demonstrates a partial understanding of key academic
 knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities when
 presented with low and moderate complexity texts or tasks and will need moderate academic scaffolds and
 supports as the student transitions to the next grade/course and progresses toward inclusive college, career,
 and community opportunities.
- At Goal: A student who performs at goal level demonstrates a satisfactory understanding of key knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities when presented with moderate and high complexity texts or tasks and may need minimal academic scaffolds and supports as the student transitions to the next grade/course and progresses toward inclusive college, career, and community opportunities.
- Above Goal: A student who performs at above goal level demonstrates a thorough understanding of key
 knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities when
 presented with high complexity texts or tasks and will need few academic scaffolds and supports as the
 student transitions to the next grade/course and progresses toward inclusive college, career, and community
 opportunities.





Scale Score Ranges

The following table lists the range of scores within each Achievement Level for science.

Level	Grade 4	Grade 8	High School
Above Goal	1290 – 1244	1290 – 1244	1290 – 1245
At Goal	1243 – 1240	1243 – 1240	1244 – 1240
Near Goal		1239 – 1232	
Below Goal		1231 – 1200	

Achievement Level Descriptors

LEAP Connect scale scores are used to assign a student's achievement in science in one of four levels. Achievement Level Descriptors (ALDs) for science further describe the knowledge, skills, and abilities that students generally demonstrate at each performance level. ALDs for science at grade 4, grade 8 and high school are provided in the following tables.

Task Complexity Descriptions

- Low task complexity: Brief scenario with simple relationships and concrete concepts using common scientific terms and practices when necessary
- Moderate task complexity: Clear scenario with multiple relationships and simple concepts using various scientific terms and practices when necessary
- **High task complexity**: Detailed scenario with complex relationships and abstract concepts using various scientific terms, practices, and relevant specific core ideas





Science Grade 4 ALDs

Above Goal At Goal	Near Goal	Below Goal
High task complexity: Moderate task complexity:	Low task complexity:	Low task complexity:
The student is able to: identify the questions that can be investigated about the transfer of energy from a moving object to another object that it collides with identify major internal and external structures of organisms that are critical for survival predict how living things will affect the shape of a landscape given a scenario describe a change that occurred in an environment based on The student is able to: identify a model which shows that energy can be converted from one form to another identify the questions that can be investigated about the changes in energy that occur when objects collide identify the initial and final forms of energy given a scenario related to energy conversion identify the plant or animal structure that best meets the plant's or animal's needs in a given scenario identify the questions that can be investigated about the changes in energy that occur when objects collide identify the questions that can be investigated about the changes in energy that occur when objects collide identify the questions that can be investigated about the changes in energy that occur when objects collide identify the questions that can be investigated about the changes in energy that occur when objects collide identify the questions that can be investigated about the changes in energy that occur when objects collide identify the questions that can be investigated about the changes in energy that occur when objects collide identify the plant or animal structure that best meets the plant's or animal's needs in a given scenario identify the funding thing about the changes in energy that occur when objects collide identify the plant or animal structure that best meets the plant's or animal's needs in a given scenario identify the plant or animal structure that best meets the plant's or animal's needs in a given scenario identify the questions that can be investigated about the changes in energy that occur when objects collide identify the plant or animal structure that best meets the plant	The student is able to: identify the fastest or slowest moving object based on respective speeds Identify what form of energy is produced by a device (e.g., sound, light, heat, motion, electricity) identify the function of various external animal structures recognize that rocks and soil can be moved by wind, water, and ice Moderate task complexity: use data related to the speed of objects to compare the energy each possesses recognize that moving objects contain energy recognize that the faster an object moves, the more energy it has identify amplitude and wavelength using a model identify how animals use their senses to help them survive choose a piece of evidence that supports an explanation of how animals use their senses to respond to their environment identify the locations of different water features of Earth given a map identify the locations of different land features of Earth given a map	The student is able to: recognize forms of energy such as motion and light identify factors that change the motion of an object relate the force applied to a given object to the impact it will have on another object recognize that waves can cause an object to move match an animal's external structure to its function identify the senses animals use to receive stimuli identify ways humans change the shape of land





Science Grade 8 ALDs

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
 identify a component(s) that energy will be transferred to or from to solve a problem identify environmental factors that can influence an organism's growth demonstrate an understanding that genetic variations in specific traits may occur as a result of small changes to genetic material select an appropriate representation as embryological evidence of relationships among species identify the relative age of fossils based on their locations in a column of rock layers use data to explain why specific resources are limited 	 The student is able to: contrast characteristics of natural and synthetic materials identify a device that maximizes or minimizes thermal energy transfer using data recognize that similarities in patterns of appearance in embryos at the same stage of development across species is evidence of relationships explain relationships among species by organizing displays of pictorial data of embryos 	 The student is able to: identify examples of chemical changes compared to physical changes use a model to identify that parents and offspring may have different traits use a map of natural resources to recognize that natural resources are distributed throughout Earth 	 The student is able to: identify objects or materials used to keep something hot or cold identify a material as a natural material or as a synthetic/manmade material identify environmental factors that can influence a plant's growth and survival use a model to identify that inherited traits passed from parents to offspring lead to differences in offspring (e.g., eye color)
	 High task complexity: identify the natural resources used to make a synthetic product use presented evidence to determine if a reaction has released or absorbed thermal energy identify that thermal energy is transferred from hotter objects to colder objects support an explanation of evolutionary relationships between living and fossil organisms with evidence describe how heat from Earth's core powers the rock cycle 	 identify examples of chemical reactions that release energy (e.g., heat or light) use a model of energy movement through the Earth's systems to identify the role of the Sun (i.e., heat source) use a model of energy movement with the Sun as the primary energy source to identify relationships between components of Earth's systems 	 match extinct organisms with present-day organisms with similar characteristics use graphics of embryo development to recognize how related organisms have similar developmental stages identify types of Earth materials that can be located at the Earth's surface (exterior) and/or its interior





Science High School ALDs

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
High task complexity: The student is able to: • given a scenario, determine a way to design an investigation related to how an organism responds to changes in its environment • modify (e.g., improve) a solution which helps protect Earth's environment • identify examples of phenotypes shown in a family pedigree • explain why there is an increased probability of individual organisms exhibiting an advantageous trait over time • determine which factor(s) resulted in a specific	 The student is able to: identify the function of a body system and how it helps an animal to survive predict what will happen to specific species over time based on an environmental change use data to identify how a change affects the populations in an ecosystem use a Punnett square to identify the probability (i.e., two out of four) of a particular trait in an offspring recognize the cause and effect relationship between a naturally occurring change in the environment and the expression of a trait in a species High task complexity: identify the best plan to gather information about how an organism responds to changes in its external environment identify human activities that can have 	 The student is able to: match a part in a body system to its function identify the function of an animal's response to external stimuli identify data related to the number of species in a stable ecosystem identify that siblings can have different characteristics even though they have the same parent use a model to identify the likelihood of a particular trait in an offspring recognize that gradual change in the environment can cause changes in organisms Moderate task complexity: identify the correct sequence of steps necessary to prevent an infection identify how biological or physical changes affect stability and change (i.e., numbers and/or types of organisms 	 Low task complexity: The student is able to: match an organ to its function match a body part to its function identify how organisms react to changes in their external environment identify various causes of infectious human diseases recognize ways to protect against infectious diseases to maintain a body's health identify treatments of viral and bacterial infections identify the need for the protection of habitats (e.g., organisms depend on having specific needs met by a particular habitat) identify that a trait can be passed from parent to
 adaptation within a species explain how gradual change in the environment can cause changes in organisms predict what will happen to specific species over time based on an approximately change. 	 a negative effect on the Earth and then identify a solution that reduces its impact on the environment describe how people can help protect the Earth's environment and biodiversity identify a reason why two siblings can have different characteristics even though they have the same parents complete a Punnett square 	 living in the ecosystem) in ecosystems classify human activities on the Earth's environment as having either a negative or positive effect 	 offspring identify the dominant trait in a given allele pair recognize different traits associated with individual members in a species