Achievement Level Definitions, Science, Grades 5, 8, & High School

Achievement Level Definitions, Science Grade 5

Science achievement level definitions describe the quality of a student’s responses on state-level alternate assessments in relation to the alternate science standards. These definitions serve as the foundation for achievement level definitions for the alternate grade level expectations in science.

Skills associated with these achievement level definitions may include some of the following:

* Identifying night and day
* Identifying the sun
* Identifying the Earth’s moon
* Identifying the position of the sun at different times
* Identifying or drawing different phases of the moon
* Identifying weather through observation
* Identifying different forms that water can take in the weather
* Matching weather to the effects it can have on the Earth’s surface
* Identifying pictures or descriptions of given animals and plants
* Identifying plants and animals, and components of the environments that animals depend on for food and shelter

Appropriate performance at grade five is clarified by the level of complexity within the standard.

**Above State Expectations**  
The student’s work demonstrates an understanding of essential concepts in science, including the ability to make connections among central ideas. The student’s response demonstrates the ability to utilize information and solve problems and explain central concepts with clarity and accuracy.  
  
**At State Expectations**  
The student’s work demonstrates an adequate understanding of essential concepts in science and connections among central ideas. The student’s response demonstrates the ability to utilize information and solve problems and explain central concepts. Student work may contain minor errors.  
  
**Below State Expectations**  
The student’s work demonstrates an incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student’s response demonstrates some ability to utilize information and solve problems. The quality of the response is inconsistent. Explanation of concepts may be incomplete or unclear.  
  
**Well Below State Expectations**  
The student’s work demonstrates a minimal understanding of essential concepts in science. The student’s response demonstrates minimal ability to solve problems. Explanations are illogical, incomplete, or missing connections among central ideas. There are many inaccuracies.

Achievement Level Definitions, Science Grade 8

Science achievement level definitions describe the quality of a student’s responses on state-level alternate assessments in relation to the alternate science standards. These definitions serve as the foundation for achievement level definitions for the alternate grade level expectations in science.  
  
Skills associated with these achievement level definitions may include some of the following:

* Identifying or demonstrating ways objects can move
* Identifying that an object’s motion can be changed by pushing or pulling
* Identifying or describing wave motions, earthquakes, vibrations and/or water waves
* Identifying human body parts
* Matching animals and/or plants to their parts
* Identifying parts that allow living things to meet basic needs
* Identifying that some living things are made of one cell and some are made of many cells
* Identifying parents and offspring
* Demonstrating an understanding of life cycles and/or identifying similar and different characteristics of offspring and parents

Appropriate performance at grade eight is clarified by the level of complexity within the standard.  
  
**Above State Expectations**  
The student’s work demonstrates an understanding of essential concepts in science, including the ability to make connections among central ideas. The student’s response demonstrates the ability to utilize information and solve problems and explain central concepts with clarity and accuracy.  
  
**At State Expectations**  
The student’s work demonstrates an adequate understanding of essential concepts in science and connections among central ideas. The student’s response demonstrates the ability to utilize information and solve problems and explain central concepts. Student work may contain minor errors.  
  
**Below State Expectations**  
The student’s work demonstrates an incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student’s response demonstrates some ability to utilize information and solve problems. The quality of the response is inconsistent. Explanation of concepts may be incomplete or unclear.  
  
**Well Below State Expectations**  
The student’s work demonstrates a minimal understanding of essential concepts in science. The student’s response demonstrates minimal ability to solve problems. Explanations are illogical, incomplete, or missing connections among central ideas. There are many inaccuracies.

Achievement Level Definitions, Science High School

Science achievement level definitions describe the quality of a student’s responses on state-level alternate assessments in relation to the alternate science standards. These definitions serve as the foundation for achievement level definitions for the alternate grade level expectations in science.

Skills associated with these achievement level definitions may include some of the following:

* Sorting objects into groups using physical properties
* Describing physical properties of objects and materials
* Using observable characteristics to describe physical changes
* Identifying chemical and physical changes
* Identifying organisms that are similar and different based on external features
* Describing how plants and/or animals look
* Describing ways in which the needs of a plant and/or animal are met by its environment
* Sorting living things based on external features
* Matching organisms to the environment in which they live
* Identifying organisms that once lived on Earth but no longer exist
* Identifying examples of fossils and/or explaining how fossils are used to help us understand the past

Appropriate performance at the high school level is clarified by the level of complexity within the standard.

**Above State Expectations**  
The student’s work demonstrates an understanding of essential concepts in science, including the ability to make connections among central ideas. The student’s response demonstrates the ability to utilize information and solve problems and explain central concepts with clarity and accuracy.  
  
**At State Expectations**  
The student’s work demonstrates an adequate understanding of essential concepts in science and connections among central ideas. The student’s response demonstrates the ability to utilize information and solve problems and explain central concepts. Student work may contain minor errors.  
  
**Below State Expectations**  
The student’s work demonstrates an incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student’s response demonstrates some ability to utilize information and solve problems. The quality of the response is inconsistent. Explanation of concepts may be incomplete or unclear.  
  
**Well Below State Expectations**  
The student’s work demonstrates a minimal understanding of essential concepts in science. The student’s response demonstrates minimal ability to solve problems. Explanations are illogical, incomplete, or missing connections among central ideas. There are many inaccuracies.