

Achievement Level Descriptors for

Grade 5 Science

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Achievement Levels and Achievement Level Descriptors

With the implementation of the Georgia Milestones Assessment System, Georgia educators have developed four achievement levels to describe student mastery and command of the knowledge and skills outlined in Georgia's content standards. Most students have at least some knowledge of the content described in the content standards; however, achievement levels succinctly describe how much mastery a student has. Achievement levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four achievement levels on Georgia Milestones are *Beginning Learner*, *Developing Learner*, *Proficient Learner*, and *Distinguished Learner*. The general meaning of each of the four levels is provided below:

Beginning Learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *need substantial academic support* to be prepared for the next grade level or course and to be on track for college and career readiness.

Developing Learners demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *need additional academic support* to ensure success in the next grade level or course and to be on track for college and career readiness.

Proficient Learners demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are prepared for the next grade level or course and are on track for college and career readiness.

Distinguished Learners demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *are well prepared* for the next grade level or course and are well prepared for college and career readiness.

More detailed and content-specific concepts and skills are provided for each grade, content area, and course in the **Achievement Level Descriptors** (ALDs). ALDs are narrative descriptions of the knowledge and skills expected at each of the four achievement levels and were developed for each grade level, content area, and course by committees of Georgia educators in March 2015 and July 2015. The ALDs are based on the state-adopted content standards.

ALDs show a *progression of knowledge and skills* for which students must demonstrate competency across the achievement levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within his/her achievement level *as well as all content and skills in any achievement levels that precede his/her own, if any*. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

| POLICY ALDs | | | |
|--|--|---|--|
| Beginning Learner | Developing Learner | Proficient Learner | Distinguished Learner |
| Beginning Learners do not yet | Developing Learners demonstrate | Proficient Learners demonstrate | Distinguished Learners |
| demonstrate proficiency in the | partial proficiency in the | proficiency in the knowledge and | demonstrate advanced |
| knowledge and skills necessary at | knowledge and skills necessary at | skills necessary at this grade | proficiency in the knowledge and |
| this grade level/course of learning, | this grade level/course of learning, | level/course of learning, as | skills necessary at this grade |
| as specified in Georgia's content | as specified in Georgia's content | specified in Georgia's content | level/course of learning, as |
| standards. The students need | standards. The students need | standards. The students are | specified in Georgia's content |
| substantial academic support to be | additional academic support to | prepared for the next grade level or | standards. The students are well |
| prepared for the next grade level or | ensure success in the next grade | course and are on track for <i>college</i> | prepared for the next grade level |
| course and to be on track for | level or course and to be on track | and career readiness. | or course and are well prepared |
| college and career readiness. | for college and career readiness. | | for college and career readiness. |
| RANGE ALDs | | | |
| Beginning Learner | Developing Learner | Proficient Learner | Distinguished Learner |
| A student who achieves at the | A student who achieves at the | A student who achieves at the | A student who achieves at the |
| Beginning Learner level | Developing Learner level | Proficient Learner level | Distinguished Learner level |
| demonstrates minimal command of | demonstrates partial command of | demonstrates proficiency of the | demonstrates advanced |
| the grade-level standards. The | the grade-level standards. The | grade-level standards. The pattern | proficiency of the grade-level |
| pattern exhibited by student | pattern exhibited by student | exhibited by student responses | standards. The pattern exhibited |
| responses indicates that students | responses indicates that students | indicates that students are most | by student responses indicates |
| are most likely able to | are most likely able to | likely able to | that students are most likely able |
| identify surface features of | differentiate between | identify surface features of | to |
| Earth; | constructive and destructive | Earth formed by constructive or | analyze surface features of |
| recognize that commonly used | geologic processes; | destructive processes; | Earth that result from |
| objects are made of parts; | recognize that an object is made | demonstrate that objects are | constructive and/or destructive |
| • identify a physical change in a | of parts; | composed of a system of | processes; |
| substance; | identify characteristics of | smaller parts; | conclude that an object's mass |
| identify static electricity and | physical and chemical changes; | explain the differences between | is the sum of its parts; |
| magnetism; | investigate the properties of | physical and chemical changes; | analyze the differences |
| • identify objects that act as a | electricity and magnetism; | investigate the properties of | between physical and chemical |
| conductor or an insulator; | recognize that living organisms | electricity and magnetism; | changes before, during, and |
| • recognize that organisms can be | can be classified by similarities; | identify the relationships | after a change; |
| grouped as animals or plants; | recognize that offspring may | between electricity and | compare and contrast |
| recognize that an offspring can | resemble their parents due to | magnetism; | electricity and magnetism and |
| resemble its parents; | inherited traits; | classify organisms by their | explain the relationships |
| | | similarities; | between them; |

Grade 5

- identify a cell;
- record observations;
- analyze numeric data; and
- analyze scientific experiments that utilize basic scientific tools.
- identify a cell as the basic unit of life and recognize some cellular parts;
- recognize that microorganisms can be both harmful and beneficial;
- record scientific observations;
- use basic numeric skills to analyze data;
- analyze investigations that utilize scientific tools; and
- utilize models, sketches, and/or text to communicate information.

- identify the characteristics upon which the classification of organisms is based;
- identify how scientists use classification;
- recognize that offspring can share both inherited and learned traits with their parents;
- diagram and label the basic parts of plant and animal cells;
- communicate how microorganisms can be both harmful and beneficial to the natural world;
- accurately record observations and use reasoning to explain observations;
- utilize numeric data to compare objects;
- analyze data and offer explanations of a scientific phenomenon;
- analyze scientific investigations;
- communicate scientific findings using data, models, sketches, and text;
- explain how cells in single-celled and multi-celled organisms differ; and
- relate the role of technology and human intervention in the control of constructive and destructive processes.

- provide supporting evidence for an organism belonging in a specific group;
- explain the classification of organisms;
- recognize that offspring and parents share traits because of the role of genes in the transfer of these inherited traits;
- compare and contrast cells and cellular parts;
- analyze how microorganisms benefit or harm other organisms in real-world situations;
- record observations and provide explanations for those observations;
- use numeric data to describe and compare objects;
- analyze data to discover and explain scientific phenomena;
- evaluate experimental design using scientific tools; and
- communicate findings in the form of models, sketches, and written reports.