



**Achievement Level Descriptors**  
**for**  
**Grade 5 Science**

Georgia Department of Education  
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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 proceed 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
<p><b>Beginning Learners do not yet demonstrate proficiency in the knowledge and skills</b> 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 <i>college and career readiness</i>.</p>	<p><b>Developing Learners demonstrate partial proficiency in the knowledge and skills</b> 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 <i>college and career readiness</i>.</p>	<p><b>Proficient Learners demonstrate proficiency in the knowledge and skills</b> 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 <i>college and career readiness</i>.</p>	<p><b>Distinguished Learners demonstrate advanced proficiency in the knowledge and skills</b> 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 <i>college and career readiness</i>.</p>
RANGE ALDs			
Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
<p>A student who achieves at the <b>Beginning Learner</b> level demonstrates minimal command of the grade-level standards. The pattern exhibited by student responses indicates that students are most likely able to</p> <ul style="list-style-type: none"> <li>• identify surface features of Earth;</li> <li>• recognize that commonly used objects are made of parts;</li> <li>• identify a physical change in a substance;</li> <li>• identify static electricity and magnetism;</li> <li>• identify objects that act as a conductor or an insulator;</li> <li>• recognize that organisms can be grouped as animals or plants;</li> <li>• recognize that an offspring can resemble its parents;</li> </ul>	<p>A student who achieves at the <b>Developing Learner</b> level demonstrates partial command of the grade-level standards. The pattern exhibited by student responses indicates that students are most likely able to</p> <ul style="list-style-type: none"> <li>• differentiate between constructive and destructive geologic processes;</li> <li>• recognize that an object is made of parts;</li> <li>• identify characteristics of physical and chemical changes;</li> <li>• investigate the properties of electricity and magnetism;</li> <li>• recognize that living organisms can be classified by similarities;</li> <li>• recognize that offspring may resemble their parents due to inherited traits;</li> </ul>	<p>A student who achieves at the <b>Proficient Learner</b> level demonstrates proficiency of the grade-level standards. The pattern exhibited by student responses indicates that students are most likely able to</p> <ul style="list-style-type: none"> <li>• identify surface features of Earth formed by constructive or destructive processes;</li> <li>• demonstrate that objects are composed of a system of smaller parts;</li> <li>• explain the differences between physical and chemical changes;</li> <li>• investigate the properties of electricity and magnetism;</li> <li>• identify the relationships between electricity and magnetism;</li> <li>• classify organisms by their similarities;</li> </ul>	<p>A student who achieves at the <b>Distinguished Learner</b> level demonstrates advanced proficiency of the grade-level standards. The pattern exhibited by student responses indicates that students are most likely able to</p> <ul style="list-style-type: none"> <li>• analyze surface features of Earth that result from constructive and/or destructive processes;</li> <li>• conclude that an object’s mass is the sum of its parts;</li> <li>• analyze the differences between physical and chemical changes before, during, and after a change;</li> <li>• compare and contrast electricity and magnetism and explain the relationships between them;</li> </ul>

<ul style="list-style-type: none"> <li>• identify a cell;</li> <li>• record observations;</li> <li>• analyze numeric data; and</li> <li>• analyze scientific experiments that utilize basic scientific tools.</li> </ul>	<ul style="list-style-type: none"> <li>• identify a cell as the basic unit of life and recognize some cellular parts;</li> <li>• recognize that microorganisms can be both harmful and beneficial;</li> <li>• record scientific observations;</li> <li>• use basic numeric skills to analyze data;</li> <li>• analyze investigations that utilize scientific tools; and</li> <li>• utilize models, sketches, and/or text to communicate information.</li> </ul>	<ul style="list-style-type: none"> <li>• identify the characteristics upon which the classification of organisms is based;</li> <li>• identify how scientists use classification;</li> <li>• recognize that offspring can share both inherited and learned traits with their parents;</li> <li>• diagram and label the basic parts of plant and animal cells;</li> <li>• communicate how microorganisms can be both harmful and beneficial to the natural world;</li> <li>• accurately record observations and use reasoning to explain observations;</li> <li>• utilize numeric data to compare objects;</li> <li>• analyze data and offer explanations of a scientific phenomenon;</li> <li>• analyze scientific investigations;</li> <li>• communicate scientific findings using data, models, sketches, and text;</li> <li>• explain how cells in single-celled and multi-celled organisms differ; and</li> <li>• relate the role of technology and human intervention in the control of constructive and destructive processes.</li> </ul>	<ul style="list-style-type: none"> <li>• provide supporting evidence for an organism belonging in a specific group;</li> <li>• explain the classification of organisms;</li> <li>• recognize that offspring and parents share traits because of the role of genes in the transfer of these inherited traits;</li> <li>• compare and contrast cells and cellular parts;</li> <li>• analyze how microorganisms benefit or harm other organisms in real-world situations;</li> <li>• record observations and provide explanations for those observations;</li> <li>• use numeric data to describe and compare objects;</li> <li>• analyze data to discover and explain scientific phenomena;</li> <li>• evaluate experimental design using scientific tools; and</li> <li>• communicate findings in the form of models, sketches, and written reports.</li> </ul>
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