

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.