



Achievement Level Descriptors for Grade 8 Science

Georgia Department of Education
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Achievement Levels and Achievement Level Descriptors

The Georgia Alternate Assessment (GAA) 2.0 is the state's alternate assessment based on alternate academic achievement standards (AA-AAAS) for those students with significant cognitive disabilities who cannot participate in the general statewide assessment program, even with maximum allowable accommodations.

The GAA 2.0 is designed to ensure that students with the most significant cognitive disabilities are provided access to the state academic content standards and given the opportunity to demonstrate achievement of the essential knowledge, concepts, and skills inherent in the standards. To that end, the GAA 2.0 assesses students' understanding of the state's alternate academic content standards, or *Extended Content Standards*, which align to the grade-level content standards. Alignment refers to the connection of the skill through which students will demonstrate what they know and can do, to the content standard expectations for general education students in a given grade. Students with significant cognitive disabilities may need to learn these skills differently, in smaller segments, with fewer identified components, at a slower pace, and/or learn skills that would provide access to the standard. The *Extended Content Standards* allow students to show learning of concepts and constructs within a grade-level standard, but at reduced levels of complexity.

The following four achievement levels generally describe students' understanding of the essential knowledge and skills outlined in Georgia's Extended Content Standards.

Level 1: Students at this level demonstrate a **limited** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need substantial academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

Level 2: Students at this level demonstrate a **partial** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need frequent academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

Level 3: Students at this level demonstrate an **adequate** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need occasional academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

Level 4: Students at this level demonstrate a **thorough** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need limited academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

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

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 Level 3 learner should also possess the knowledge and skills of a Level 2 learner and a Level 1 learner.

| Policy ALDs | | | | |
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| Standards | Level 1 | Level 2 | Level 3 | Level 4 |
| | Students at this level demonstrate a limited understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and may need substantial academic support as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment. | Students at this level demonstrate a partial understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and may need frequent academic support as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment. | Students at this level demonstrate an adequate understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and may need occasional academic support as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment. | Students at this level demonstrate a thorough understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and may need limited academic support as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment. |
| Range ALDs | | | | |
| Students identify and describe the structure and properties of matter. | | | | |
| S8P1b S8P1c | Identify a model that shows the movement of particles in one state of matter and the change in movement when thermal energy is added. | Identify a model that shows the movement of particles in one state of matter and the change in movement when thermal energy is removed. | Identify a model which compares the movement of particles in two different states of matter and the change in movement in each state when | Develop a model which identifies and explains the change in movement of particles through the states as thermal energy is added or removed. |

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| | | Identify steps needed to show a chemical and physical change in matter. | thermal energy is added or removed. Identify and sequence steps needed to show one difference between a chemical and physical change in matter. | Identify and sequence steps needed to show two differences between a chemical and physical change in a given material. |
| Students describe energy transformations within a system. | | | | |
| S8P2b S8P2d | Identify steps needed to show the transformation between kinetic and potential energy within a single system. | Identify steps needed to show heat transfer on molecular motion through either conduction, radiation, or convection. | Identify and sequence steps needed to explain the transformation between kinetic and potential energy within a single system. Identify and sequence steps needed to show heat transfer on molecular motion through conduction, radiation, or convection and identify the effect of the transfer. | Explain a sequence of steps needed to show a transformation between kinetic and potential energy within a single system. Identify and sequence steps to show the effects of heat transfer on molecular motion through conduction, radiation and convection. |
| Students show an understanding of the relationships between force, mass, and motion of objects. | | | | |
| S8P3a S8P3b | Identify statements which describe the effect of a balanced forces on the motion of an object. Identify statements which describe the | Identify key data on a motion graph which shows changes in speed and distance. | Identify key data on a motion graph which show changes in speed, which indicates acceleration, or changes in distance, which indicates velocity. | Identify key data on a motion graph which show changes in speed, which indicate acceleration, and changes in distance, which indicates velocity. |

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| | effect of an unbalanced force on the motion of an object. | | Develop one to two statements which describe the effects of balanced or unbalanced forces on the motion of an object. | Develop more than two statements which connect one of Newton's Laws of Motion to the effect of a balanced or unbalanced force on the motion of an object. |
| Students explain why and how light waves behave differently than sound waves. | | | | |
| S8P4a S8P4f | Ask a prepared question to identify parts of an electromagnetic and mechanical wave. | Ask a prepared question to identify similar or different qualities of electromagnetic and mechanical waves. | <p>Identify a model in which one wave property (e.g., frequency, amplitude, or wavelength) changes, and describe the change in energy.</p> <p>Ask two or more prepared questions to explain similar qualities of electromagnetic and mechanical waves.</p> <p>Ask two or more prepared questions to identify parts of electromagnetic and mechanical waves.</p> <p>Ask two or more prepared questions to identify similar or</p> | <p>Develop a model in which more than one wave property (e.g., frequency, amplitude, and/or wavelength) changes, and describe the change in energy.</p> <p>Develop a model showing changes in a wave and predict the change in energy.</p> <p>Ask one initial and one follow-up question to identify similar or different qualities of electromagnetic and mechanical waves.</p> |

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| | | | different qualities of electromagnetic and mechanical waves. | |
| Students use evidence to communicate information about gravity, electricity, and magnetism as major forces acting in nature. | | | | |
| S8P5a | Identify statements from evidence which support the claim that gravitational fields exist between objects and exert forces on objects. | Identify statements from evidence, which support the claim that magnetic and electric fields exist between objects and exert forces on objects. | Identify statements from evidence which support the claim that gravitational fields exist between objects and exert forces on objects even when the objects are not in contact. Identify statements from evidence which support the claim that magnetic and electric fields exist between objects and exert forces on objects even when the objects are not in contact. | Develop one or more statements from evidence, which support the claim that gravitational fields exist between objects and exert forces on objects even when the objects are not in contact. Develop one or more statements from evidence, which support the claim that magnetic and electric fields exist between objects and exert forces on objects even when the objects are not in contact. |