Georgia Department of Education

Educating Georgia's Future

7th GRADE SCIENCE



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Welcome to Seventh Grade! Our goal is to help you understand the ways your child will engage in science this year. This letter will help you better understand the science expectations for 7th Grade and the supporting resources to provide ideas of how to work with your child at home throughout the school year. For additional support and questions, please contact your child's science teacher.

In 7th grade science, there are five content standards. These standards are designed to engage your child in student-centered instruction to make sense of phenomena and design solutions focused on common life science concepts and principles. Your child will use the science and engineering practices and crosscutting concepts to explore and explain how organisms function at various levels and interact with one another and the environment. Your child will develop an understanding of how these practices, concepts, and scientific principles can be used to make sense of new phenomena and solve problems.

7th GRADE SCIENCE CONCEPTS

LIFE SCIENCE

Evaluate historical models and develop models that show how organisms are classified in the past and present.
Develop models and construct arguments to describe cell structures, cell structure interactions, cells organization into body systems, and how the body systems interact to keep organisms healthy.
Ask questions, develop models, and construct explanations about how genes pass on specific traits, the differences in offspring from various types of reproduction, and how humans have influenced the inheritance of desired traits in some species.
Ask questions, analyze data, develop models, and construct explanations to describe organism interactions, cycling of matter, flow of energy, and effects of non-living factors on organisms in different terrestrial and aquatic environments.
Use mathematical representations, analyze data, evaluate and construct explanations to describe how populations change from one generation to the next, the influence of genetic variation on the survival of a species, and examine the fossil record for information about species of the past and their relationships to modern organisms.

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How will your child engage in learning science?

Science and Engineering Practices

Students will engage in making sense of phenomena in science by asking questions, developing and using models, analyzing and interpreting data, using mathematics and computational thinking, engaging in argument from evidence, constructing explanations, and obtaining, evaluating, and communicating information.

Crosscutting Concepts

Students will explore patterns, cause and effect, and systems and system models while examining life science ideas. Students will explore energy and matter, stability and change, and structure and function within Earth's ecosystems.

Phenomena

Phenomena are the real-world observable events to which students can apply the science ideas, concepts, and practices. Some examples of phenomena include cuts on your skin eventually heal, some lizards can grow a new tail, my sibling gets sick from eating certain foods that I can eat, and there has been an increase in the number of breeds of dogs over time.

Getting to know your child's teacher is important, and communication with the teacher throughout the year will support your child's individual growth while learning science. The resource links below are provided to help support learning at home as you engage your child in meaningful work while learning science. If at any time you have additional questions or need to request additional support, please reach out to your child's science teacher.

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GEORGIA CLASSROOM

Georgia Classroom

GaDOE SuitCASE

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Georgia Standards