A Guide to the Colorado Academic Standards

Science

Second Grade

Working Together

To support families and teachers in realizing the goals of the Colorado Academic Standards, this guide provides an overview of the learning expectations for Second Grade Science. This guide offers some learning experiences students may engage in during this school year, experiences that may also be supported at home.

Why Standards?

Created by Coloradans for Colorado students, the Colorado Academic Standards provide a grade-by-grade road map to help ensure students are successful in college, careers, and life. The standards aim to improve what students learn and how they learn in ten content areas – emphasizing critical-thinking, creativity, problem solving, collaboration, and communication as important life skills in the 21st century.

Science for Elementary Schools (k-5)

The science standards in the elementary grades lay the foundation for students to work as scientists by asking testable questions, collecting and analyzing different types of evidence, and by providing rationales for their interpretations. Mastery of these standards will result in students who have a deep understanding of science and how scientific knowledge can provide solutions to practical problems.

Where can I learn more?

- Contact your school district regarding local decisions related to standards, curriculum, resources, and instruction.
- Colorado Academic Standards Booklets: http://www.cde.state.co.us/standardsandinstruction/GradeLevelBooks.asp
- Joanna Bruno, Science Content Specialist at 303-919-3907, Bruno_j@cde.state.co.us

COLORADO Department of Education

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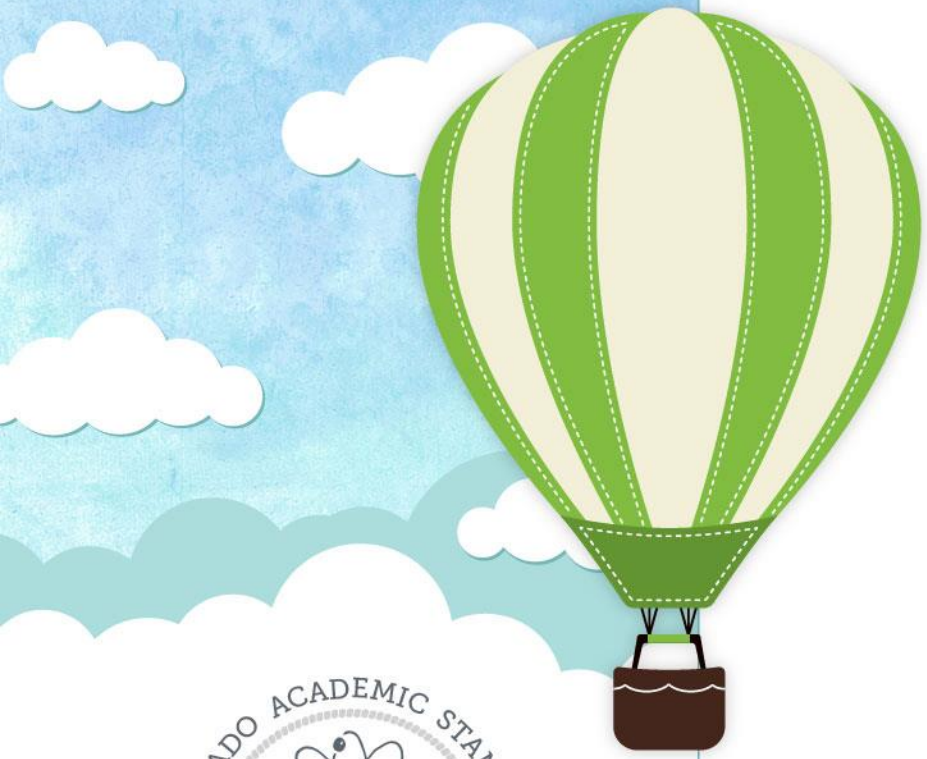
At the end of Second Grade, students can...



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Science Learning Expectations for Second Grade

Physical Science

Recognize that changes in speed or direction of motion are caused by forces (pushes and pulls); select appropriate tools for collecting information (data); measure the change in speed or direction of an object.

Life Science

Understand that organisms depend on their habitat to satisfy needs; recognize that each plant or animal has different structures or behaviors that serve different functions; collaborate with other students in developing scientific explanations about how organisms depend on their habitat.

Earth Science

Understand that weather and the changing seasons impact the environment and organisms (humans, plants, and other animals); describe different ways that scientists seek to understand organisms and their interactions with the environment.

Throughout the Second Grade, you may find students…

- Identifying and predicting how the direction or speed of an object may change due to an outside force (push, pull); analyzing and interpreting the effect of forces on the motion of objects.
- Identifying how an environment and/or the behaviors of a population help organisms survive within a habitat.
- Using evidence to develop a scientific explanation about how organisms depend on their habitat and how the weather and changing seasons affect organisms such as humans, plants, and other animals – and the environment.
- Analyzing and interpreting information (data), such as temperature in different locations (sun or shade) at different times and seasons, to figure out how organisms and the environment are influenced by the weather and changing seasons.
- Predicting how severe weather can have an effect on events such as floods and forest fires.