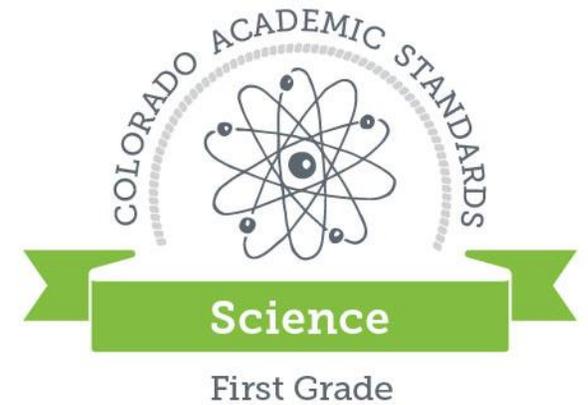


A Guide to the Colorado Academic Standards



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 First 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?

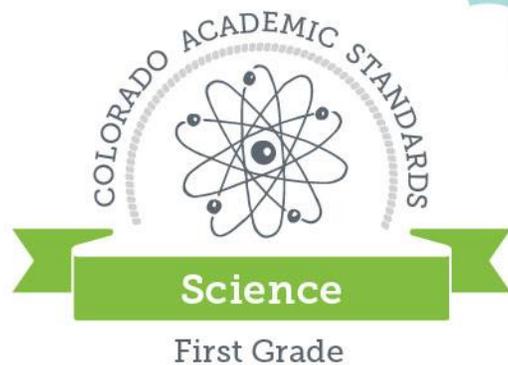
- Contact your school district regarding local decisions related to standards, curriculum, resources, and instruction.
- Colorado Academic Standards Booklets: <http://www.cde.state.co.us/standardsandinstruction/GradeLevelBooks.asp>
- Joanna Bruno, Science Content Specialist at 303-919-3907, Bruno_j@cde.state.co.us



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



Science Learning Expectations for First Grade

Physical Science

Understand that solids and liquids have unique properties and that scientists make predictions based on these properties.

Life Science

Explain that offspring have characteristics that are similar to but not exactly like their parents' characteristics; understand that an organism is a living thing that has physical characteristics (features) that help it survive.

Earth Science

Understand that materials that make up the surface of the Earth (rocks, minerals) can be compared and classified based on their properties; sort rocks and minerals in a number of ways based on different characteristics (features).

Throughout the First Grade, you may find students...

- Analyzing and interpreting observations about solids and liquids and their unique properties; identifying the similarities and differences between two or more groups of solids or liquids; using evidence to classify solids and liquids based on their properties.
- Using evidence to analyze and interpret data regarding the similarities and differences between parents and offspring (including both plants and animals); questioning others (peers) about evidence used to document about similarities and differences between parents and offspring; interpreting information represented in pictures, illustrations, and simple charts.
- Identifying and representing similarities of various materials on Earth (texture, size, color, and shape); sorting, grouping, and classifying Earth's materials based on observations; making predictions about how Earth materials on Earth might be useful; communicating ideas about differences between soils from different locations; using a variety of tools to observe, analyze, record, and compare Earth materials; analyzing what happens when people reduce, reuse, and recycle materials.