



STANDARDS TEMPLATE

Next Generation Science Standards (NGSS) Connections

Cross-cutting Concepts

Cause and Effect: Simple tests can be designed to gather evidence to support or refute student ideas about causes

Scale, Proportion, and Quantity: Relative scales allow objects and events to be compared and described (e.g. bigger and smaller, hotter and colder, faster and slower)

Scientific and Engineering Practices

1. Asking questions (for science) and defining problems (for engineering)
3. Planning and carrying out investigations
4. Analyzing and interpreting data
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

Core Ideas: Kindergarten

Earth Science	K-ESS3-3 : Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
Engineering Design	K-2-ETS1-1: Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETS1-3: Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

Core Ideas: 1st Grade

Engineering Design	K-2-ETS1-1 : Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
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	K-2-ETS1-3: Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.
Core Ideas: 2nd Grade	
Physical Science	2-PS1-1: Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. 2-PS1-2: Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. 2-PS1-3: Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.
Engineering Design	K-2-ETS1-1: Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. K-2-ETS1-3: Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

For guidance and inspiration understanding specific NGSS concepts, practices, and core ideas, view the short video explanations at

<http://www.bozemanscience.com/next-generation-science-standards/>