



STANDARDS TEMPLATE

Next Generation Science Standards (NGSS) connections

Cross-cutting Concepts

Scale, Proportion, and Quantity:

- Natural objects and/or observable phenomena exist from the very small to the immensely large or from very short to very long time periods.
- Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.

Science and Engineering Practices

1. Asking questions (for science) and defining problems (for engineering)
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

Planning and Carrying Out Investigations:

Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.

- Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon.

Core Ideas: 3rd - 5th grade

Engineering Design

3-5-ETS1-1: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

	<p>3-5-ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p> <p>3-5-ETS1-3: Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</p>
Core Ideas: 4th Grade	
Earth Science	4-ESS3-1: Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.
Core Ideas: 5th Grade	
Earth and Human Activity	5-ESS3-1: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.