Science A–Z

MINERALS, ROCKS, AND SOIL (3–4)

Correlation of Resources to National Science Standards

Use the chart below to discover how selected Science A–Z resources in the Minerals, Rocks, and Soil unit support certain Next Generation Science Standards (NGSS). While a single reading resource, science activity, comprehension support, or lesson cannot satisfy an entire Performance Expectation, using these resources together can help students develop the understandings and abilities they will need in order to satisfy each standard listed below. Most standards cited align with the grade level of this Science A–Z unit. For a reverse correlation tool that connects the standards to resources, visit our NGSS correlations page: www.sciencea-z.com/main/NextGenerationScienceStandards.*

Check the Performance Expectations Key below this chart for the complete text of the standards cited for each resource.

Resource Type	Resource Title	Performance Expectations
Unit Nonfiction Book	*Minerals, Rocks, and Soil* (3 reading levels)	**3-LS4-1; 4-ESS1-1; 4-ESS2-1; 4-ESS2-2; 4-ESS3-1**
Project-Based Learning Pack	*Where Does Your Garden Grow?*	**5-LS2-1; 3-5-ETS1-1**
Interactive Science Lesson	*Fossils: Evidence of Earth's Past* Part 1: What Are Fossils?	**3-LS4-1**
Interactive Science Lesson	*Fossils: Evidence of Earth's Past* Part 2: Clues in the Rock Layers	**3-LS4-1; 4-ESS1-1**
Process Activity	*Weathering Rocks*	**4-ESS1-1; 4-ESS2-1**
FOCUS Book	*Quicksand!*	**2-ESS2-3; 4-ESS3-2**
FOCUS Book	*Diamonds*	**4-ESS1-1; 4-ESS2-1; 3-5-ETS1-1**
FOCUS Book	*Fossils*	**3-LS4-1; 4-ESS1-1; 3-5-ETS1-2; 3-5-ETS1-3**
FOCUS Book	*Moon Rocks*	**4-ESS1-1; 3-5-ETS1-3**
FOCUS Book	*Minerals in a Computer*	**3-5-ETS1-1**
Investigation Pack	Topic: Rocks I. Files: *Shale; Basalt; Gneiss; Granite; Marble; Conglomerate* Mystery File: *Chalk*	**3-LS4-1; 4-ESS1-1; 4-ESS2-1; 4-ESS2-2**
Debate	*Vegetable Garden or Forest?*	**4-ESS2-1; 3-5-ETS1-2**
Science Video	*Classification of Rocks*	**4-ESS1-1**
Science Video	*Deep-Ocean Volcanoes*	**4-PS3-2; 4-ESS2-2**
Science Video	*Extracting Gold*	**5-PS1-3**

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Resource Type	Resource Title	Performance Expectations
Science Video	*Greenland's Grand Canyon* (no audio)	**4-ESS1-1**
Science Video	*How Limestone Forms*	**4-ESS1-1; 4-ESS2-1**
Science Video	*How Water Affects Mountain Landscapes*	**2-ESS2-3; 4-ESS2-1**
Science Video	*Mineral-Rich Salt*	**5-PS1-3**
Science Video	*MLK Fountain* (no audio)	**4-ESS1-1**
Career Files	*Mineralogist; Miner; Soil Scientist*	**4-ESS1-1; 4-ESS2-1; 4-ESS3-1**
Quick Read	*Nonliving Resources* (3 reading levels)	**4-ESS3-1**
Quick Read	*Splendid Soil* (3 reading levels)	**5-LS2-1**
Quick Read	*Using Gold* (3 reading levels)	**4-ESS3-1**
Science Diagram	*Describe and Compare Rocks*	**4-ESS1-1**
Science Diagram	*Earth's Layers*	**4-ESS2-2**
Science Diagram	*Periodic Table of the Elements*	**5-PS1-3**
Science Diagram	*The Rock Cycle*	**4-ESS1-1; 4-ESS2-1**

Performance Expectations Key

2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.

3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.

4-PS3-2. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

4-ESS1-1. Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features.

4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

5-PS1-3. Make observations and measurements to identify materials based on their properties.

5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

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.

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.

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.