

Grade 3- Earth Materials

Lesson	ISI Kit Correlation	Outdoor Learning Center Activity	Skill Building	Habits of Mind	Process/Design Standards	Content Standards
Rock ID	1.- Mock Rock 2.- Scratch Test 3.- Calcite Quest	Using a dichotomous key, students will test a rock or mineral using hardness, chemical weathering and observation to key out their rock 50 to 70 minutes	Observing and Describing Make and use simple equipment and tools, extend the sense to make observations. Generate questions and make observations about natural processes	Wondering and thinking about the Natural & Physical World Seeking Answers Through Exploration Observing Carefully Developing Critical Thinking Skills	Nature of Science: Note booking Nature of Science: Investigating Nature of Science: Observing	3.2.2- Detailed Characteristics 3.2.3- Identify and classify
The Mineral Museum	3.- Calcite Quest	Learn about Moh's scale of hardness and explore a variety of minerals and their everyday uses. Also observe fossils and how they are formed and what information they can give us. 20 to 30 minutes	Observing and Describing Generate questions and make observations about natural processes	Seeking Answers Through Exploration Pursuing Ideas In Depth Observing Carefully Wondering and thinking about the Natural & Physical World	Nature of Science: Investigating Nature of Science: Observing	3.2.4- Fossils 3.2.5- Uses of plants & Animals
Everyday Minerals	3.- Calcite Quest	Using a Calcium Carbonate and Sodium Bicarbonate base then adding color and flavor students can make their own toothpaste, compare recipes. 50 to 70 minutes	Make and use simple equipment and tools, extend the sense to make observations. Observing and describing	Wondering and thinking about the Natural & Physical World Collaborating and Sharing Observing Carefully Developing Critical Thinking Skills	Nature of Science: Note booking Nature of Science: Investigating Nature of Science: Observing Design Process: Identifying need Design Process: prototype	3.2.6- Human uses

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Additional: Chocolate chip cookie mining

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Standard 2: Earth Science

Core Standard:

Observe, describe and identify rocks and minerals by their specific properties.

Core Standard:

Observe and describe how natural materials meet the needs of plants and animals (including humans).

3.2.2 Observe the detailed characteristics of rocks and minerals. Identify rocks as being composed of different combinations of minerals.

3.2.3 Classify and identify minerals by their physical properties of hardness, color, luster and streak.

3.2.4 Identify fossils and describe how they provide evidence about the plants and animals that lived long ago and the nature of their environment at that time.

3.2.5 Describe natural materials and give examples of how they sustain the lives of plants and animals.

3.2.6 Describe how the properties of earth materials make them useful to humans in different ways. Describe ways that humans have altered these resources to meet their needs for survival.