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## Mineral Sorting Kit

RM-6

Students use a simple identification “key” to sort 15 small rough and polished rock and mineral samples. The special key is large enough for children to actually place the specimens directly on it. The kit includes rocks and minerals such as mica, quartz, calcite, amethyst, pyrite, plus 10 others. This kit has been successfully field tested in hundreds of classes with children in grades 2 to 5.



### This Kit Includes:

- 15 Rock and Mineral Samples
- 1 Sorting Key (two 11" x 17" sheets)

### Classroom Activities

1. Place the 15 rock and mineral samples on the START circle, and begin the separation process. You should end with one sample on each of the rectangles.

**Note:** *Some younger students may need help with the idea of a key to classify and separate a set of objects. They may need to practice using this key several times. Explain that the polished samples are not found this way in nature.*

# Classroom Activities

continued

- 2.** Have students try to identify each of the 15 rocks and minerals without using the key.
  
- 3.** Have students place the samples in alphabetical order by their names without looking at the list.
  
- 4.** Create a different key which could be used to separate this set of rocks and minerals.
  
- 5.** Devise a key for a different set of rocks and minerals.
  
- 6.** After the students have mastered this set, ask them to identify unpolished specimens of the same kinds of rocks. Unpolished specimens can be purchased at many science supply houses, as well as at museums and rock and mineral shows.

# NGSS Correlations

Our Mineral Sorting Kit and these lesson ideas will support your students' understanding of these Next Generation Science Standards (NGSS):

## Elementary

### 2-PS1-1

Students can use the Mineral Sorting Kit to plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

### 2-ESS1-1

Students can make observations of the minerals in the Mineral Sorting Kit and use information from media to construct an evidence-based account that Earth events can occur quickly or slowly.

### 5-PS1-3

Students can use the minerals in the Mineral Sorting Kit to make observations and measurements to identify materials based on their properties.

## Middle School

### MS-ESS2-1

Students can make observations of the minerals in the Mineral Sorting Kit as part of an investigation to develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.

## High School

### HS-ESS1-5

Students can make observations of the minerals in the Mineral Sorting Kit of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.

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## Suggested Science Idea(s)

### 2-PS1-1 - 5-PS1-3

Students can make observations and sort the minerals in the Mineral Sorting Kit. They can describe and classify different kinds of materials by their observable properties.

### 2-ESS1-1

Students can make observations on the minerals in the Mineral Sorting Kit to look for crystals. If there are well-formed, large crystals, the rock shows evidence of a slow process. Small crystals shows evidence of faster cooling.

### MS-ESS2-1 - HS-ESS1-5

Students can make observations of the minerals in the Mineral Sorting Kit as part of a study of Earth's geologic history.



## Take Your Lesson Further

As science teachers ourselves, we know how much effort goes into preparing lessons. For us, “*Teachers Serving Teachers*” isn’t just a slogan—it’s our promise to you!

Please visit our website  
for more lesson ideas:

[TeacherSource.com/lessons](http://www.TeacherSource.com/lessons)

Check our blog for classroom-tested  
teaching plans on dozens of topics:

<http://blog.TeacherSource.com>

To extend your lesson, consider these Educational Innovations products:

### **Fossil Sorting Kit** (FSL-800)

Each 2 lb bag typically contains more than 100 assorted fossils along with a sorting guide. This kit is perfect for introducing students to organisms that existed over 400 million years ago! The sorting guide includes pictures of many of the fossils along with information about their approximate age and modern relatives. Kit typically contains fossilized ammonites, trilobites, coral, gastropods, and at least four other types of fossils.



### **Mica** (RM-910)

Everyone loves to pull apart the layers from a specimen of mica. These mica specimens from New England will provide samples for at least thirty students. Sold in one lb packages.

### **Obsidian Arrowheads** (RM-200)

Students are always fascinated when something mundane like a rock is formed into something useful like an arrowhead. These recently-made large arrowheads were hand-crafted from volcanic obsidian. Each is unique. A great demonstration tool when teaching about Native Americans, igneous rocks, or man's early use of tools.

