

# CAVE OF THE MOUNDS<sup>®</sup>

National Natural Landmark

## A Rock Apart Sorting Activity

### You will need:

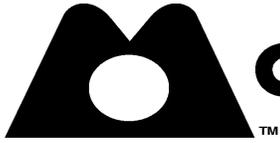
- Mineral specimens - milky quartz, feldspar, mica
- Crushed granite rock - use granite or granite pegmatite  
(One film canister will be enough for a class of up to 45 students.)
- 1 hand lens for each student
- 2 toothpicks for each student
- 1 “A Rock Apart” worksheet for each student (attached)  
(Download from educator pages at [www.caveofthemounds.com](http://www.caveofthemounds.com))

### **Activity:**

1. Students are to sort the crushed rock into categories using the worksheet, hand lens & toothpicks.
2. The piles should contain similar looking material as students have sorted by the characteristic of color. Students use the hands lens to observe & describe each mineral pile. Students record color, luster (dull, shiny, metallic, etc.), and cleavage (round, flat, 90° angle, etc.) of the pieces in each pile.

**Discuss:** Rocks are made up of two or more minerals. Minerals have physical characteristics that help identify them; color, crystal structure, cleavage, and luster are just a few. Rocks & minerals are important materials and have many practical and commercial uses. As a class, generate a list of uses and discuss why protection might be important.

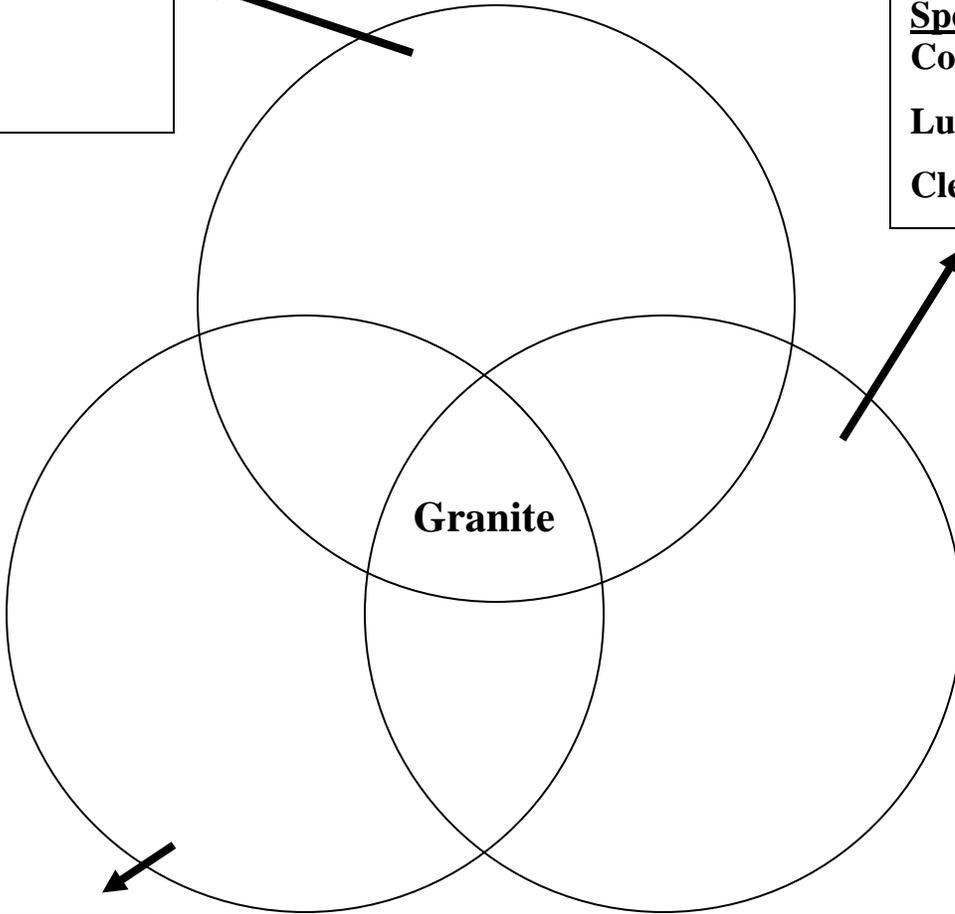
A Rock Apart worksheet attached.



### A Rock Apart Worksheet

**Specimen Attributes:**  
**Color: All white**  
**Luster:**  
**Cleavage:**

**Specimen Attributes:**  
**Color: Black/gray**  
**Luster:**  
**Cleavage:**



**Specimen Attributes:**  
**Color: Pink**  
**Luster:**  
**Cleavage:**

**Dull Black**

**All Others**

After completing the sorting activity, answer the questions on the back side of this worksheet.

## A Rock Apart Reflection Questions

1) What difficulties did you encounter when sorting minerals according to one attribute or property?

2) Were the large specimens and the sorted piles similar?

3) How many pieces of each color did you sort out in 15 minutes?

a. all white= \_\_\_\_\_

b. all pink= \_\_\_\_\_

c. shiny black or gray= \_\_\_\_\_

4) Can you name each of the specimens sorted? Place the names in the appropriate circles on the Venn diagram above.