



Create A Collection That Rocks!

Science – Grade 4-6

Students create their own rock collection.

Materials:

- Fishing or tackling box, or a large, sturdy shoe box
- White hobby paint or acrylic paint found in a craft store
- Small paintbrush
- Fine-point, permanent marker
- Rocks
- Paper or journal
- Pen

Instructions:

1. Go outside and collect some rocks! Where do the students think are other good areas to collect rocks?
2. Have the students create a chart to keep track of their rocks. The chart should include the specimen number, the name and type of the rock, where and when it was obtained, and extra space for notes.
3. The students can label each rock with a specimen number by placing a small dot of white paint on the rock, allowing it to dry, then writing a number on the paint spot.
4. Have the student make observations about what the rock looks like and where it came from in order to help identify it.
5. Test and identify the rocks. Here are some ways to test them:
 - a. Hardness test: How hard is the rock? Geologists classify rocks by how hard they are to scratch, on a scale of 1 to 10, with 10 being the hardest. For example, a penny has a hardness of 4. So if the penny is able to scratch the rock, the rock must be less than 4, but if the rock scratches the penny, the rock must be more than 4.



- b. The streak test: Rub your rock against a piece of unglazed porcelain such as a kitchen or bathroom tile. Does it leave a streak? You can sometimes identify a rock by the color of its streak.
 - c. Cleavage test: You can sometimes identify a rock by how it breaks, or cleaves. For instance, halite or salt splits into cubes while mica splits into thin sheets.
6. Store the rocks in a box away from heat. Be careful when handling the rocks and the box. The bottom half of an egg carton may help hold small specimens if using a shoe box.
7. Encourage the students to continue to collect rocks to add to the collection, and to organize it however makes sense to them. One way is by size, or location where it was found, or by whether it is igneous, sedimentary, or metamorphic.