

Classifying Rocks

Geology activity for Grade K-2

Materials needed

- A collection of rocks from home or the playground
- The internet, an encyclopedia, or a dictionary
- Check to see if your library has any mineral or rock classification books with lots of pictures...
- A chalkboard/white board or digital camera and LCD projector

Procedures

1. What colors are the rocks in this collection?
2. Try sorting the rocks by putting them into groups according to their color.
 - a. If some of the rocks have multiple colors either go by the overall color/most abundant
 - b. If there is only one color present, you might have a mineral this is great because you could now talk about the primary difference between minerals and rocks.
 - i. Minerals are the same throughout
 - ii. Rocks are made up of more than one mineral and/or other rocks.

At this point draw a few pictures on the board or take some photos to record the students work.

3. Do the rocks have different textures? Are some smooth, rough, shiny, dull or crumble easily?

At this point draw a few pictures on the board or take some photos to record the students work.

4. Do all of your rocks of the same size appear to weigh the same when you lift them? If not, classify them again according to density.

Again, draw a few pictures on the board or take some photos to record the students work.

5. Can your students can think of any other ways to sort these rocks into a different group/s?

6. Use your resources (internet or books) to lead a discussion about the student's rocks. Compare how geologists classify rocks to the methods the students just used...
7. Ask your students to 'keep an eye out' for how rocks are used... Where do they see them... Minerals and rocks are a very important resource for the materials that we use every day!!!

Instructor assistance

Prior to the day of this activity ask your students if they have ever picked up a rock and wondered where it came from... If they say YES, ask them if they would like to share some of their rock collections (send a note home to parents to ask for their assistance). These students may have experience in collecting and identifying rocks that they can share with the group. You might also consider inviting a local geologist, soil scientist, or member of a local mineral/rock/gem club.

As students learn the different ways rocks may be classified or sorted encourage them to draw pictures of the rocks and if possible label them (it's ok if you are not using the proper terms) just get them excited about making observations and using them to group the rocks.