

Make a Fossil Rubbing

Along the top of the low wall in front of the hidden fossils, you can find examples of fossils that are great for making rubbings. Use your pencil and this paper and make a fossil rubbing in the space below.



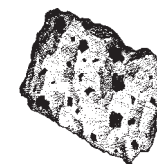
Rocks Rock Activity Guide For Girl Scouts Answer Key

Welcome Juniors! You can earn your Rocks Rock badge by completing this guide. Visit the Earth Sciences Cave and Ancient Arizona to find answers to some of these rockin' questions. As you exit the cave, you'll see an old mining car. This is our Mine Dump. Start here!

1. Be a Rock Hound!

Rocks are like cookies. They need a mix of ingredients and either heat or pressure to form them. Minerals are the ingredients in rocks. At our mine dump, you can pick out one or two minerals to take with you. Match them to the ones in the outdoor glass case or inside the mineral gallery. What kind(s) did you find?

_____ *various answers* _____



2-3. Geo Hunt and Weathered or Not

As you stand at the mine dump, look into the canyon below. What caused it to form? erosion, downcutting from rainwater run-off

Now look at the mountains around you. The mountains that the Desert Museum sits in used to be part of a massive



force of Mount St. Helens. Find out more about that recent eruption and think about what happened here long ago.

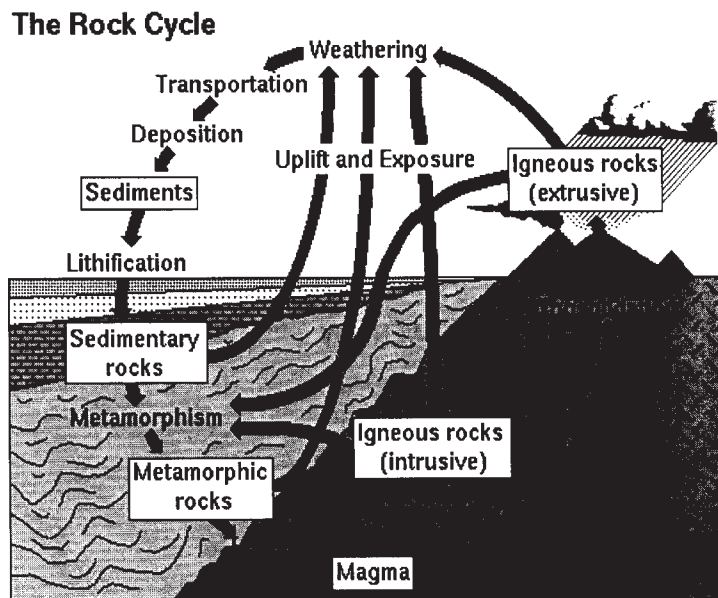


Can You See the Swamp?

Look through the viewing tubes at the red hills across the wash. The red stone is called mudstone. This used to be the mud at the bottom of a swamp. How long ago? _____ ~ 100 million years ago _____

4. What Type is it?

The Rock Cycle is how rocks are formed. Rocks fall into three different types depending on how they pass through the rock cycle. **Igneous** rocks come from super-heated, molten rock from deep in the earth. **Sedimentary** rocks form when sand or other tiny particles erode from weathered rock and get cemented together. **Metamorphic** rocks can be rocks formed in either of these ways but which get melted and changed by intense heat or pressure.



volcano. 65 million years ago it erupted with 1,000 times the **What Type Is It?** (continued)

With this information, circle the right answers.

A. What type of rock is mudstone?

igneous sedimentary metamorphic

B. What type of rock is the volcanic rock in the Tucson Mountains?

Igneous sedimentary metamorphic

5. Fossil Fun!

Continue on to our Ancient Arizona exhibit. You will see many examples of fossils here. Fossils can form when the hard parts of a plant or animal get covered with mud. Over many years, minerals in the hard parts turn to stone. Fossils can also show traces of ancient life or ancient environments, such as footprints or ripple marks.



Discover fossils hidden in the sand and rock. Give two examples of animal body parts that became fossils:

___various: can include bones, teeth, horns, eggs, claws, etc.
You can dig out your own fossils and bring them home if you like.

6. Geo Careers

Geology is the study of rocks. Many different careers require a background in geology. One is the study of fossils. What do you call a scientist who studies ancient life and ancient environments by studying fossils?

___paleontologists

(hint: you can find the answer on the sign on the low wall in front of the hidden fossils.)