**Mining the Web**  Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The sites listed below are available on the **Rocks & Minerals** page of the **Kid Zone** at <http://sciencespot.net/>.

**Site #1: Rock Hounds**

1. Explore the **Rock Creations** area to complete each section.

For thousands, even millions of years, little pieces of our earth have been eroded – broken down and worn away by \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_. These little bits of our earth are washed downstream where they settle to the bottom of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_. Layer after layer of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ earth is deposited on top of each. These layers are pressed down more and more through time, until the bottom layers slowly turn into \_\_\_\_\_\_\_\_\_\_\_.

Igneous rocks are called \_\_\_\_\_\_\_\_\_\_ rocks and are formed either underground or above ground. Underground, they are formed when the melted rock, called \_\_\_\_\_\_\_\_\_\_, deep within the earth becomes trapped in small pockets. As these pockets of magma cool \_\_\_\_\_\_\_\_\_\_ underground, the magma becomes igneous rocks. Igneous rocks are also formed when \_\_\_\_\_\_\_\_\_\_ erupt, causing the magma to rise above the earth’s surface. When magma appears above the earth, it is called \_\_\_\_\_\_\_\_\_\_\_\_\_. Igneous rocks are formed as the lava cools above ground.

Metamorphic rocks are rocks that have “\_\_\_\_\_\_\_\_\_\_\_\_” into another kind of rock. These rocks were once \_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_ rocks. How do sedimentary and igneous rocks change? The rocks are under tons and tons of \_\_\_\_\_\_\_\_\_\_\_\_\_, which fosters \_\_\_\_\_\_\_\_\_\_\_\_\_\_ build up, and this causes them to change. If you examine metamorphic rock samples closely, you’ll discover how flattened some of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the rock are.

2. Explore **Discovering Earth’s Treasures** area to classify each rock. Use I for igneous, S for sedimentary, and M for metamorphic.

\_\_\_\_\_ Conglomerate \_\_\_\_\_\_ Gneiss \_\_\_\_\_\_ Granite \_\_\_\_\_\_ Gypsum

\_\_\_\_\_ Limestone \_\_\_\_\_\_ Obsidian \_\_\_\_\_\_ Pumice \_\_\_\_\_\_ Sandstone

\_\_\_\_\_ Schist \_\_\_\_\_\_ Scoria \_\_\_\_\_\_ Shale

3. Try the **Rock Hound Quiz**. How did you do? Circle one.

Poor Fair Good Great Perfect

**Site #2: Rock Cycle**

1. What are rocks made of? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What are the four layers of the Earth? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. If you were to use an apple to represent the Earth, what would each part be?

The peep represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The white part of the apple would be the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The core of the apple represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the Earth.

**Site #3: State Symbols: Geology**

1. What is our state mineral? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which mineral is the most popular? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How many states have adopted it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. How many states do not have “geosymbols”? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Challenge:**

Identify each state by its “rocky” nickname. (You will need to use a search engine for this one!)

The Gem State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The Diamond State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The Granite State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The Silver State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The Golden State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The Copper State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_