

Rock Cycle Simulation

Name: _____

Period: _____

Follow the directions in order to simulate the rock cycle. Fill out the questions as you conduct this activity.

1. Get out crayons and shave off pieces of it.

This is an example of _____

_____ : The breaking down of rocks into smaller pieces by chemical or mechanical means.

2. Pick up the crayon shavings and move them to the foil.

This is an example of **erosion**

Erosion: _____

3. Drop the crayon shavings onto the aluminum foil and fold it into a packet.

This is an example of **deposition**

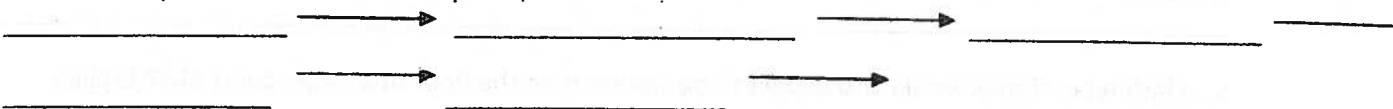
Deposition: _____

4. Put packet into vice and apply **LIGHT** pressure.

This is an example of **compaction to form sedimentary rock.**

Sedimentary Rocks: _____

Write the sequence for a sedimentary rock, sandstone, to form:



5. Put packet back into vice and apply heavy pressure (do not break my vice please).

This is an example of **heat and pressure to form metamorphic rock.**

Metamorphic Rock: _____

What group(s) of rocks can become metamorphic rocks? _____

Give 2 examples of rocks that can become metamorphic rock and the name of the metamorphic rock it will change into.

1. _____

2. _____

6. Melt crayon shavings (make sure you have safety glasses on)

7. After you melt the shavings you have a couple of choices:

1. Pour over ice cubes to form "pumice"

2. Pour into ice water to form "obsidian"

3. Pour into warm/hot water to form an intrusive rock such as granite

This is an example of **melting and cooling to form igneous rocks.**

Igneous Rocks: _____

What "rock" did you make? _____

What is the origin of the rock you made? _____

What is the texture of the rock you made? _____

Questions:

1. How are rocks and minerals different? _____

2. What are the three groups of rocks? _____

3. Which rock types are most common within Earth's crust? Which kind is most common at Earth's surface? _____

4. Why is the set of natural processes by which rocks change into other types of rocks (rock cycle) called a cycle? _____

5. Which type of rock would you expect to be common on the floor of a large, deep lake? Explain.

6. Draw a diagram showing how an igneous rock could change into a metamorphic rock and how the metamorphic rock could change into a sedimentary rock.