Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3.2 Rock Cycle Lab

**QUESTION:** How does one type of rock become another?

**RESEARCH:** Using your vocabulary sheet for Unit 3 and rewrite the following terms. Use textbook if necessary.

1. Weathering

5. Compaction

6. Cementation

7. Lava

1. Sediment
2. Erosion
3. Deposition

**HYPOTHESIS:**

If I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a sedimentary rock, then it will become a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock.

If I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a metamorphic rock, then it will become \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

If I allow lava to cool, then it will become a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock.

If I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a sedimentary rock, then it will become sediments.

**DESIGN & CONDUCT:** Part I - Making Sedimentary Rock (Compaction of Layers)

WEATHERING:

**ACTION - Weather your rock. In other words, use a coin to shave your crayons into small pieces. Collect the shavings in separate piles over a sheet of paper. Be as neat as you can.**

a. What do the different colored crayons represent?

b. Are the fragments all the same size or shape? Describe.

c. Would this be true of rock fragments in nature?

d. What are some of nature’s tools to erode rocks?

EROSION & DEPOSITION:

**ACTION - In your square of aluminum foil, each lab partner, in turn, should pile their rock fragments in a neat pile in the center of the foil. You will move and lay down (DEPOSIT) the rock fragments.**

e. Describe the shape and size of spaces between your rock (crayon) pieces. Are they large or small and irregular or regular shaped?

f. How does nature move and lay down (DEPOSIT) rock?

COMPACTION & CEMENTATION:

**ACTION - Carefully fold the loose layers of crayon shavings inside the aluminum foil. Use your hands to GENTLY press your crayon (crayon shavings).**

g. Do you see any layers? Are they thin or thick?

h. Describe the compaction. Are they tightly or loosely compacted?

Part II- Making Metamorphic Rock (Heat and Pressure)

**ACTION - Rewrap the loosely compacted, sedimentary rock-type crayons shavings in the aluminum foil. Stomp on your tin foil to apply HEAT and PRESSURE to your sedimentary rock.**

i. Do you see any layers? Are they thin or thick?

j. Describe the compaction. Are they tightly or loosely compacted?

Part III - Making Igneous Rock (Melting and Cooling)

**ACTION - Raise your hand and Ms. Northrup will apply heat to your crayon shavings or pieces of “sedimentary” and “metamorphic” rocks.**

k. Describe what the melted “rock” (magma) looked like.

l. Describe the cooling process and the final appearance of the “igneous.”

**CONCLUSION:** Write a paragraph using the RERUN strategy.

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