Name: _____ Period: _____

Rock Identity Crisis – AKA The Rock Cycle - 2 Day Lab

The earth is made up of three types of rocks. These rocks are always on the move to be recycled by the earth's natural processes. This recycling process is called the Rock Cycle. In the Rock Cycle, a rock may take different routes but for each rock type there is a specific process and energy flow. Different routes through the Rock Cycle make the wide variety of rocks that you see. As you take your rock on its journey through the Rock Cycle, fill out your handout.

Phenomenon Answers:
What are the similarities and differences of the rocks?

Why would artists choose these rocks as their medium? Explain your reasoning.

Can rocks change over time? Explain your answer.

Part I: The Rock Cycle Basics - In the boxes below, using colored pencils, draw your rock at each stage of its first journey.

Stage 1: Sediments	Stage 2: Sedimentary Rock
Stage 3: Metamorphic Rock	Stage 4: Igneous Rock

Part II: Your Rock's Journey Begins

Roll #	Rock Type	What Happened to Your Rock? (Think Recycling)	Where Did the Energy Come From?
1			
2			
3			
4			
5			

Conclusion Questions

1. Write a short paragraph describing your rock's journey. At least 1 sentence per roll.

2. Compare your rock's journey with your neighbor's. Explain the similarities and the differences.

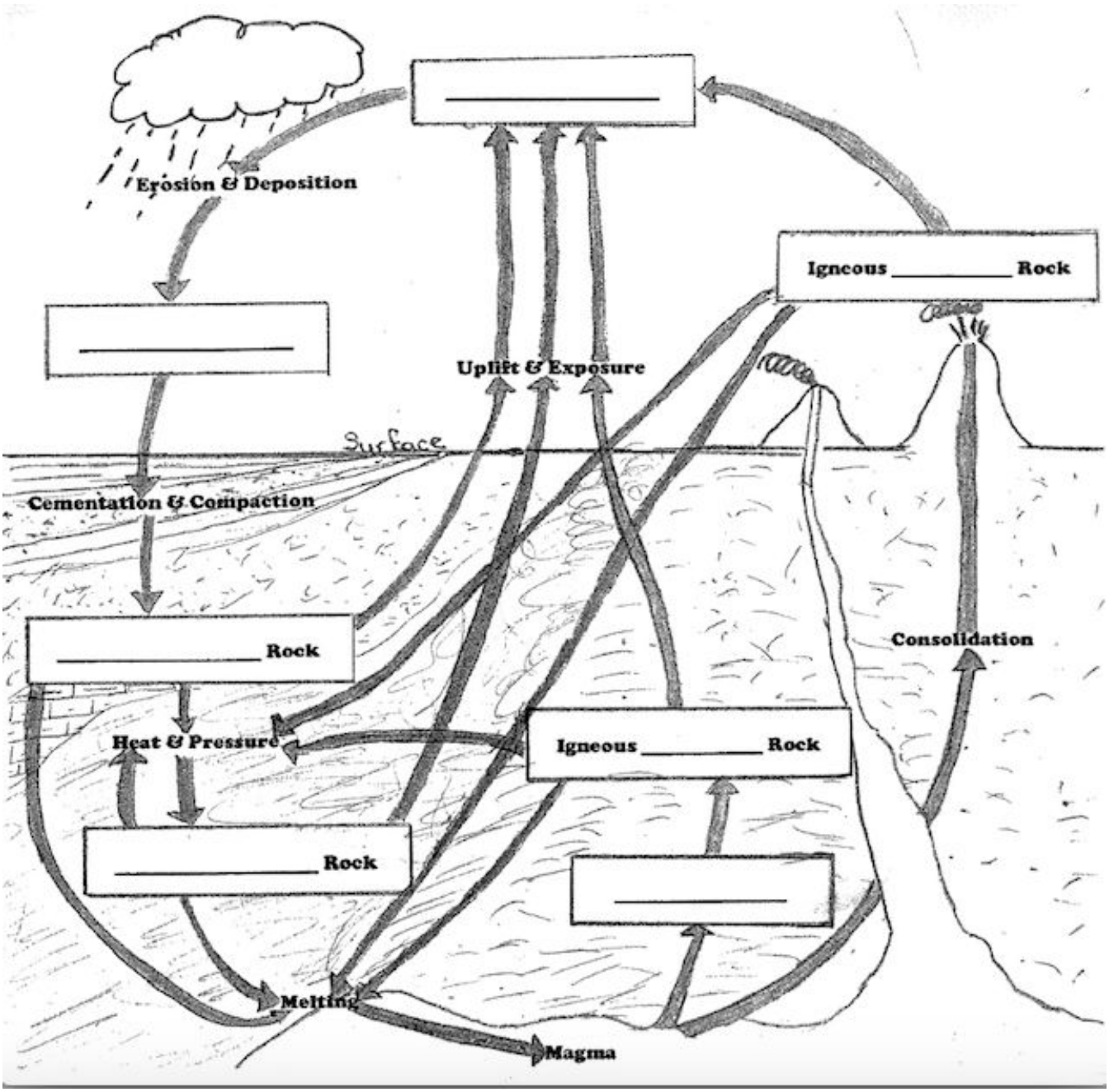
3. What are the two sources of the energy in the rock cycle?

4. Explain the relationship between energy flow and matter cycling.

5. How does our model differ from the real rock cycle in nature? (Using Candy does not count.)

Part III: Rock Cycle Labels

Use the following terms to fill in the blanks on the rock cycle image below: weathering, crystallization, sediments, metamorphic, extrusive, intrusive, and sedimentary.



Part IV: Real World Applications

6. After learning about the Rock Cycle, what qualities are artists looking for in rocks for their medium?

7. What are some other applications humans have used rocks for?

Part V: Quiz - Apply what you learned

8. Go to your teacher to receive two rock samples and a geology handbook.

9. Draw each rock sample below and write down qualitative observations of each rock sample.

10. Using the knowledge you have gained in the last two days, create a model of the rock cycle path each of your rock samples took. Be sure to identify the rock sample as being metamorphic, igneous, or sedimentary. Explain your reasoning.