

ROCK CYCLE LAB

Name: _____

Draw a diagram of what the rock cycle stations are below. Put a star next to the station you are starting at. For each roll of the die, indicate where you are moving. If you stay at the same station, indicate how many times you stay there with tally marks.

1. Compaction & Cementation

7. Sedimentary Rock

2. High Temperature & Pressure

8. Melting

3. Sediments

9. Cooling & Hardening

4. Igneous Rock

10. Magma

5. To the Surface

11. Weathering & Erosion

6. Metamorphic Rock

Start at your own station. Roll the die on the table. Record the outcome (what the die says) in the table below, then do as instructed — either stay where you are or move on to the correct station. Roll the die again and continue, being sure to draw in the arrows above.

Roll Number	Outcome	Roll Number	Outcome	Roll Number	Outcome
1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	

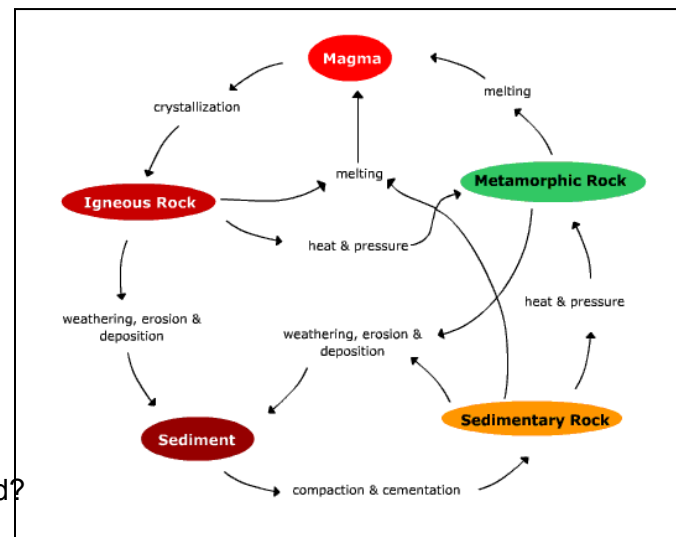
Lab Questions:

Count how many times you were at each station of your rock cycle above. Fill in column two of the table below. Then, assume that each step of the rock cycle took 200,000 years. Multiply and fill in column three.

Lab Station	Number of times	Number of years (each time = 200,000 yrs)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		

- Where did you spend most of your time?
- How long was the entire rock cycle? (remember each roll = 200,000 years)
- WHY didn't everyone follow the same path?

- Is there only one sequence of steps in the rock cycle? HOW CAN YOU TELL?
- According to the diagram, what can happen to a sedimentary rock once it is formed?
- What can happen to an igneous rock once it is formed?
- What can happen to a metamorphic rock once it is formed?



- When rocks are subjected to weathering and erosion at the earth's surface, what type of rock do they eventually become? EXPLAIN HOW THIS HAPPENS.
- When rocks melt, what kind of rocks do they become? HOW DOES THIS HAPPEN?
- What happens to rocks when they are subjected to high temperatures and great pressures, and/or chemical reactions?