Name: _____ Date: _____ Period: ____

ROCK CYCLE LAB

DIRECTIONS: ROLL, WRITE, MOVE, REPEAT!!

INITIAL POSITION: _____

						What happened?
1st	Roll #: ____	After	200,000	years…		
2nd	Roll #: ____	After	400,000	years…		
3rd	Roll #: ____	After	600,000	years…		
4th	Roll #: ____	After	800,000	years…		
5th	Roll #: ____	After	1,000,000	years…		
6th	Roll #: ____	After	1,200,000	years…		
7th	Roll #: ____	After	1,400,000	years…		
8th	Roll #: ____	After	1,600,000	years…		
9th	Roll #: ____	After	1,800,000	years…		
10th	Roll #: ____	After	2,000,000	years…		
11th	Roll #: ____	After	2,200,000	years…		
12th	Roll #: ____	After	2,400,000	years…		
13th	Roll #: ____	After	2,600,000	years…		
14th	Roll #: ____	After	2,800,000	years…		
15th	Roll #: ____	After	3,000,000	years…		

						What happened?
16th	Roll #: ____	After	3,200,000	years…		
17th	Roll #: ____	After	3,400,000	years…		
18th	Roll #: ____	After	3,600,000	years…		
19th	Roll #: ____	After	3,800,000	years…		
20th	Roll #: ____	After	4,000,000	years…		
21st	Roll #: ____	After	4,200,000	years…		
22nd	Roll #: ____	After	4,400,000	years…		
23rd	Roll #: ____	After	4,600,000	years…		
24th	Roll #: ____	After	4,800,000	years…		
25th	Roll #: ____	After	5,000,000	years…		
26th	Roll #: ____	After	5,200,000	years…		
27th	Roll #: ____	After	5,400,000	years…		
28th	Roll #: ____	After	5,600,000	years…		
29th	Roll #: ____	After	5,800,000	years…		
30th	Roll #: ____	After	6,000,000	years…		

SUMMARY: ON THE ATTACHED DIAGRAM, DRAW ARROWS TO SHOW HOW YOU MOVED THROUGH THE ROCK CYCLE!

11. Weathering and erosion

3. Sediments

5. To the surface

1. Compaction and cementation

4. Igneous Rock

7. Sedimentary rock

9. Cooling and hardening (crystallization)

2. High temperature and pressure

10. Magma

12. Recrystalization

8. Melting

6. Metamorphic rock

INTERPRETATION

1. Where did you spend the most time? _____

2. Why is the rock cycle called a cycle? _____

_____

3. What are the possible directions that SEDIMENTARY ROCK can take in this cycle? _____

_____

4. What steps can happen after materials are brought TO THE SURFACE (Station 5)? _____

_____

5. Why didn't everyone follow the same path? _____

_____

6. How much of the rock cycle can be observed, and how much is inferred (list specific steps in your answer)?

_____

_____

7. How might people be affected (in both the short and long term) by the movement of earth material through the rock cycle?

_____

_____

_____

8. Assuming that each "roll" requires 200,000 years, determine the average time it takes for each of the following steps to occur:

COOLING AND HARDENING to SEDIMENTS = _____

HIGH TEMP. AND PRESSURE to THE SURFACE = _____

WEATHERING AND EROSION to IGNEOUS ROCK = _____