

NAME: _____ PERIOD: _____ DATE: _____

LAB PARTNERS: _____ LAB #9

STARBURST ROCK CYCLE

INTRODUCTION

The rocks that make up the Earth are constantly being recycled. One form of rock is often changed into another form of rock through certain processes of nature that occur over time.

OBJECTIVES

To model the rock cycle using starburst. The candy represents rocks and sediments and will be referred to as sedimentary rock, metamorphic rock, igneous rock, sediments and magma in the procedure.

MATERIALS

3 different colored Starburst candies, scissors, piece of in foil or small foil pie plate, hot plate, map colors or markers, paper, heavy book, blank rock cycle diagram.

TIME 1 period

PROCEDURES

Sedimentary Rock

Weathering

1. Take your three different colored Starbursts and cut them into as many small pieces as you can.
2. Put the pieces into a pile and draw what you observe in your **sediment box** below.

Compaction and Cementation

3. Pick up the “sediments” and gently push them together so they all form in to one piece.
4. Set the piece down and draw what you observe in the **sedimentary rock box** below.



Sediment Box



Sedimentary Rock Box

Metamorphic Rock

5. Warm the “rock” in your hands again, create friction heat by rubbing quickly between hands.
6. Fold this “rock” in half, place paper on top, and press down on it applying greater pressure with book on top.
7. Draw what you observe in the **metamorphic rock box** below.
8. Place your “metamorphic rock” on the piece of tin foil.
9. Turn on the hot plate and place the tin foil on the hot plate.
10. Observe the “metamorphic rock” as it melts.
11. Draw what you observe in the **magma box** below.
12. Take your foil off the hot plate being careful not to spill the “magma”.
13. Turn off the hotplate.



Metamorphic Rock Box



Magma Box

Igneous Rock

16. Set the “magma” on the table and observe it as it cools and hardens.
17. Draw what you observe in the **igneous rock box** below.
18. Take the hardened “igneous rock” and break it in to “sediments. Repeat step 3 again to form “sedimentary rock.”
19. Clean up – throw away the rock, candy wrappers, wax paper, and foil paper. Do not throw away the knives.



Igneous Rock Box

LABORATORY QUESTIONS

1. What did your group do to simulate weathering rocks?
2. What did your group do to make the sedimentary rocks stick together?
3. What did your group do to make the metamorphic rocks stick together?
4. What was the difference between what you did to the sedimentary rocks and what you did to the metamorphic rocks?
5. What did your group do to make the igneous rocks?
6. What was different between what you did to the metamorphic rocks and the igneous rocks?
7. Using the information you learned, fill in the boxes on The Rock Cycle diagram below.



