Starburst Rock Cycle Lab

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. We are going to create a model of this in today's lab.

Materials:

-3 different colors of Starbursts
(The starbursts will represent rocks.)
-Scissors
-Piece of aluminum foil
-Hot plate
-Book

Procedure

1. Take the three different colored Starburst and cut them into as many small pieces as you can. Put them in a pile. Draw what you see, after completing this step, in the box below.

What do these pieces of Starbursts represent? _____

With what process might you compare cutting up the Starbursts? Explain.
_____
_____

2. Pick up the small pieces of Starbursts and push them together so that they form one big piece. Set this piece down and draw what you observe.

Which type of rock does this most likely represent? Explain.
_____
_____

3. Take the big piece that you formed in Step 2 and warm it in your hands for two minutes. After two minutes, place it on a piece of paper and fold

the paper in half. Place the book on top of the folded paper, and push down for one minute. Remove the book, open the paper, and draw what you observe in the box below.

Which type of rock does this most likely represent? Explain.

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_____

4. Place the "rock" from step 3 onto your piece of foil. Take the foil to Ms. Keener who will place it on the hot plate for 5 minutes. At the end of the five minutes, Ms. Keener will remove it from the hot plate.

5. Allow it to cool for 3 minutes. Observe what happens. Make a drawing of your observation

Which type of rock does this most likely represent? Explain.

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Analysis Questions:

1. We already know that we could turn the sedimentary rock into metamorphic rock because we simulated that in this lab. How could you turn the sedimentary rock into igneous rock without going through the metamorphic stage?

2. You are probably starting to see that any form of rock can be changed into any other form of rock. How could a rock be changed but still be classified as the same form of rock?

3. This is only a model. When scientists use models to represent processes, there are limitations. What are some of the limitations of this model? (Hint: Think about how this model is different from the process in nature.

Complete the Analysis and Conclusion on a separate sheet of paper.