Science 7 - Planet Earth

Starburst Rock Cycle Lab

Purpose:

Using Starburst candies, you will carry out various processes of the rock cycle.

Materials:

- 4 starburst candies of different colours
- Clean scissors
- Plastic bag
- Textbooks
- Pie plate or foil
- Hot plate

Procedure:

- 1. Make sure your scissors are very clean and use them to cut up your Starburst candies to form sediments. Draw what you observe in the "<u>sediments</u>" box on your observation table. Answer question 1 in the Guiding Questions section.
- 2. Put your sediments into your plastic bag and squeeze them together to form a solid mass. You have now formed <u>sedimentary rock</u> draw this in your Observations table and answer Guiding Question 2.
- 3. Keeping the "rock" in the plastic bag, warm it in your hands for a while. You can also use a lamp for a minute or two to provide some extra heat.
- 4. Once your "rock" is warmed up, put two textbooks on top of your rock and push down to provide pressure. You have now created *metamorphic rock* draw this in your Observations Table.
- 5. Take your "rock" out of the plastic and put it on the metal pie plate OR make a small bowl out of aluminum foil. Put this on a hot plate and observe what happens as the "rock" melts. Draw your <u>magma</u> in your Observations Table. Answer Guiding Question 3.
- 6. Using tongs, remove your foil plate from the hot plate and, if time permits, allow to cool at room temperature. If you are pressed for time, put the plate in the fridge or freezer.
- 7. Once your magma has solidified, you have now formed *igneous rock*. Draw this in your Observations table.

Observation Table:

At various stages in your procedure you will be asked to sketch what you see. Record your sketches in the table below.

Sediments	Sedimentary Rock	Metamorphic Rock	Magma	Igneous Rock

Guiding questions:

1. Which natural processes can be represented by you cutting up the candies in step 1? Give specific examples.

- 2. Which of the two sedimentary rock formation processes are represented by what you did in step 2? Give reasons to support your answer.
- 3. What would be providing the heat to melt the rock in real life?

Application Question:

Now that you have made Igneous Rock, explain how this rock could go through any other process of the Rock Cycle and which kind of rock would result from that process.