

Name _____



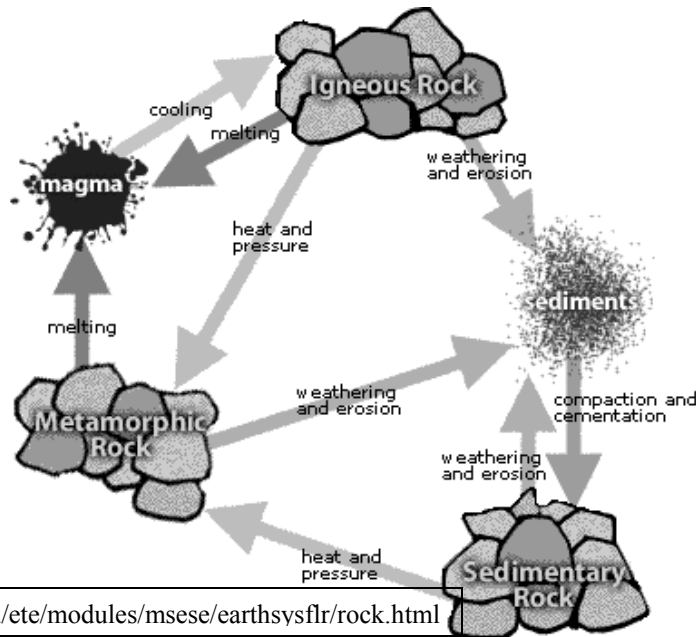
GOGGLES ON AROUND OPEN FLAMES

Problem: To simulate the changes that occur during the rock cycle

Background Information: The **ROCK CYCLE** is a diagram that shows the slow, continuous process of rocks changing from one type to another. The Rock Cycle is a series of changes. Igneous rock can change into sedimentary rock or into metamorphic rock. Sedimentary rock can change into metamorphic rock or into igneous rock. Metamorphic rock can change into igneous or sedimentary rock.

The rock cycle is an illustration that is used to explain how the three rock types are related to each other and how Earth processes change a rock from one type to another through geologic time. **Plate tectonic movement** is responsible for the recycling of rock materials and is the driving force of the rock cycle

A trip through the rock cycle takes millions of years.



Materials:

Sugar cube	Candle	Test tube clamp
Foil	Hand lens	Goggles

Procedure:

- 1. Examine the sugar cube with a hand lens. How is the sugar cube like sedimentary rock?

- 2. Crush the sugar cube into a powder. What part of the rock cycle does this represent?

- 3. Make a "boat" with your foil. Pour the crushed sugar into the foil boat. What part of the rock cycle does this movement represent?

- 4. Use the test tube clamp to hold the boat over the candle flame. Observe as the sugar begins to melt. What part of the rock cycle does this represent?

- 5. Set the foil boat aside and let the sugar cool and harden. What part of the rock cycle does this represent?

- 6. Break the hardened sugar into pieces. What part of the rock cycle does this represent?

Conclusion:

Describe in your own words how the rock cycle works.
