Chocolate Rock Cycle

Purpose: To model the rock cycle by using chocolate candies to simulate changes that the rocks go through at each step of the cycle.

TEKS: 6.10 B

Materials:

- Wax paper
- 3-5 different types of chocolates
- Plastic knives
- Aluminum foil in 3"x6" pieces
- hot plate
- oven mitts or tongs
- pie tin

Directions:

1. Give each group a piece of wax paper to use as a work surface.
2. Have each group use the plastic knives to shave each piece of chocolate into a separate pile on the wax paper.

Part One:

1. Fold the aluminum foil in half and open it back up. On one side sprinkle one type of chocolate shavings to make an even layer. Use the edge of your knife to make a square. Pat it down with the wax paper.
2. Repeat step one with each type of chocolate adding one layer at a time on top of the previous layer.
3. After all layers have been added, place the wax paper on top. Then fold the other half of the aluminum foil over the layers and apply ***light*** pressure with your hand for 5 seconds and release.
4. Open the foil and observe the shavings. Use your knife to cut the rock in half to see the layers formed. Answer the questions on the lab page for part one of the experiment.

Part Two:

1. Now close the foil back over the "rock".
2. Rub your hands together quickly to heat them.
3. Apply pressure to the foil for one minute using your hot hands.

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4. Open the foil and observe.
5. Close the foil and apply pressure with heated hands again, this time in a different direction than the last time. Apply pressure for one minute.
6. Open the foil and observe the rock. Slice it in half with the knife to see what has happened to the layers. Answer the questions for part two of the experiment.

Part Three:

1. Place the rock into the pie tin and place it on a heated hot plate.
2. Once the rock has melted, use the tongs or oven mitt to remove the tin from the heat and allow it to cool.
3. When the rock has completely cooled, remove it from the tin and slice it in half to observe it. Answer the questions for part three of the experiment.