**Volcano**

**OBJECTIVE:**

Create a volcano to model an explosion due to convergent tectonic plates

**TERMS TO GO OVER:**

Tectonic plates

Convergent Boundaries

Divergent Boundaries

Transform Boundaries

Volcano

Continental Plate

Oceanic Plate

**PRE-LAB DEMONSTRATION MATERIALS:**

* 2 square foam pieces

**PRE-LAB DEMONSTRATION PROCEDURE:**

1. Use the foam pieces to demonstrate convergent, divergent, and transform boundaries.

**LAB MATERIALS:**

* Styrofoam bowl
* Lab bottle
* Foam sheets
* 2% Sodium alginate solution
* Food coloring
* Dry ice

**GROUP LEADER/VOLUNTEER/TLC ROLE**

Fill the lab bottles with the sodium alginate and set off the volcanoes. Also, assist students with holding their foam pieces or handing them pieces of tape as they glue them down.

**SETUP PROCEDURE**

1. In the middle of the bottom of the Styrofoam bowls, cut a hole the size of the lab bottle so then it fits securely.

**LAB PROCEDURE**

1. Put the Styrofoam bowl upside down on the table
2. Place the lab bottle right side up within the hole so then its bottom is on the table
3. Next, wrap the foam sheet around the bowl and lab bottle so then it forms a cone – leaving a hole at the top, about 2mm above the top of the lab bottle
4. Next, glue the sheet down, then tape it secure until the glue dries
5. Once ready to explode, take the volcano out to the site of explosion
6. Take out the lab bottle and fill halfway with sodium alginate solution
7. Add a spoonful of dry ice and very quickly secure the lid of the lab bottle and place back into the volcano – you are more than likely going to get splattered, so take precautions