

Name: \_\_\_\_\_

# Lab: Tiny Volcano

A volcano is a release of pressure that is built up below Earth's crust. This eruption allows hot lava, volcanic ash, and gases to escape from a magma chamber below the surface. Today we will model this in the lab.

## Materials:

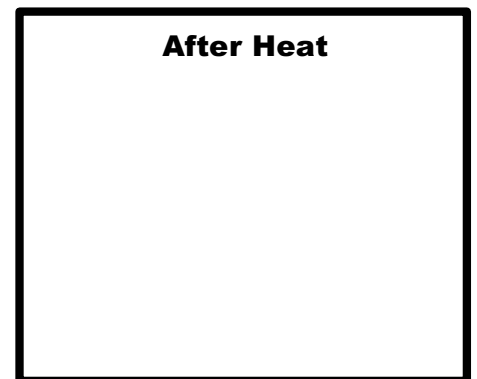
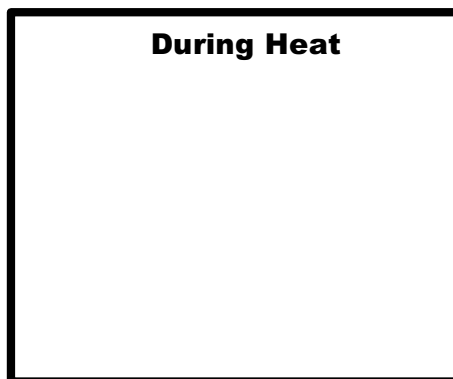
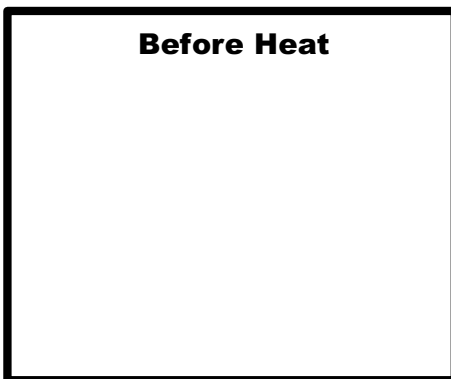
- 1- 400 mL empty glass beaker
- 1- 400 mL glass beaker filled with sand
- 1 red piece of wax
- Hot plate
- Plastic spoon

## Procedure:

1. Obtain a beaker and fill it with sand up to the 75 mL line.
2. Place a red piece of wax near the edge of the beaker but not quite touching the glass and nestle down into the sand (the wax should not be touching the bottom of the beaker).
3. Cover the wax with more sand, this time fill to the 200 mL line. Make sure the wax is completely covered.
4. Carefully add water to the beaker (you don't want to stir up the sand) until the water reaches the 250 mL line.
5. Place the beaker on your hotplate and set temperature at a level 10. Watch to see results.
6. Clean up- throw away wax, drain water from beaker (**don't dump the sand down the sink**) leave the sand in your beaker, unplug your hotplate.

## Analysis:

1. Draw and **color** the progression of your experiment.



2. Which of the following would describe the type of volcano that you modeled in the lab? (Circle one)    Active    Dormant    Extinct
3. In this model we saw that pressure builds up inside of Earth, what causes this pressure?
4. What is another natural disaster that might release this pressure?
5. Active volcanos can be found on **fault lines**, why might this be a place that pressure is released?

# Video: Volcanoes

1. What volcano erupted in 1980?
2. Volcanoes occur where two \_\_\_\_\_ run into each other.
3. The rocks on the \_\_\_\_\_ islands of Hawaii are older than the rocks on the \_\_\_\_\_ islands.
4. Some volcanoes \_\_\_\_\_.  
Other volcanoes \_\_\_\_\_.
5. What is in a volcano that makes it explode?
6. What are the three types of volcanoes?
  - a.
  - b.
  - c.
7. How hot is lava?
8. What is a wind loaded with pumice & volcanic ash that explodes from a volcano?
9. What is a volcano that will never erupt again?
10. What is a volcano that is sleeping?

