

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

# TYPES of VOLCANOES

***Complete the following while working through the different sections of this assignment***

## **Mini-Lab**

Phenomenon- Viscosity - The different liquids represent different types of lava. Follow the directions and record your observations.

Directions - use 3 to 4 science notebooks and an aluminum pan to create a ramp. Collect a dropper full of the liquid labeled low viscosity, place the end of the dropper near the top of the pan and release the liquid. Observe how the liquid slides down the aluminum pan. If you spill any liquid onto the table, please clean the table. Repeat this process for the medium viscosity and high viscosity.

1. What differences did you observe as the liquids flowed down the pan?
2. What pattern did you observe or notice as you tested each of the liquids?
3. Based on your observations, what do you think viscosity means?
4. Which fluid do you think would represent lava from a nonexplosive volcanic eruption? Explain why.
5. Which fluid do you think would represent lava from an explosive volcanic eruption? Explain why.

Before continuing, please clean up the area and return all of the supplies. The rest of this assignment will require a Chromebook. Go to the class weebly website, [dixiemiddlescience.weebly.com](http://dixiemiddlescience.weebly.com) click on the buttons with the matching titles.

## **Nonexplosive Eruptions Article**

6. Describe an effusive eruption.
7. Why do mafic lavas flow rather than explode?
8. Compare and contrast a'a and pāhoehoe lavas.

## Explosive Eruptions Article

10. Why do felsic lavas explode rather than flow?
11. What is the role of water in an explosive eruption?
12. Why do felsic magmas erupt explosively?

## Types of Volcanoes - Video

13. What volcano erupted in 1980? \_\_\_\_\_
14. Volcanoes occur where two \_\_\_\_\_ run into each other.
15. The rocks on the \_\_\_\_\_ islands of Hawaii are older than the rocks on the \_\_\_\_\_ islands.
16. Some volcanoes \_\_\_\_\_.  
Other volcanoes \_\_\_\_\_.
17. What is in a volcano that makes it explode?
18. What are the three types of volcanoes?
  - a.
  - b.
  - c.
19. How hot is lava? \_\_\_\_\_
20. What is a wind loaded with pumice and volcanic ash that explodes from a volcano?
21. What is a volcano that will never erupt again?
22. What is a volcano that is sleeping?

