Science Fair Volcano







BY Will Kawalec, Lead Educator

MATERIALS

Clay

- Paint or markers (optional)
- Liquid dish soap
- Vinegar
- Baking soda
- Food coloring (optional)
- Cooking tray or baking dish or beach towel (all for cleanup/optional)

HOW LONG WILL THIS TAKE TO DO?

60 minutes
PLUS CLAY
DRYING TIME

DEVELOPMENT SUBJECT AREAS:

Ar

VA: CR 1.2.3.PK-5

Science

5-ESS2-1. 5-PS1-2.3.4. 4-ESS2-2. 4-PS3-2.

This lesson will let kids create a volcano in the classroom! Most educators will be familiar with the concept of the

lesson, as children will create a chemical reaction mimicking the eruption of a volcano.

This tried-and-true experiment is an exciting and informational academic activity that allows kids to get messy while learning real science. The kit provided will allow for multiple classrooms to participate and grant students an opportunity to experiment with real science.

DIRECTIONS

To be done prior to the eruption: Make a volcano out of clay and let dry for at least 24 hours, this volcano should be large enough to hold roughly 3 ounces of liquid. A simple addition to this project would be placing a small container inside the volcano where the reaction can take place.

STEP 1 Prepare an area that is okay to get messy and have the child work from this area.

STEP 2 Add two tablespoons of baking soda to the top of your volcano.

STEP 3 Add one tablespoon of dish soap.

STEP 4 Add food coloring (optional).

STEP 5 Add two tablespoons of vinegar and get ready for your volcano to erupt.

STEP 6 Observe how the 'lava' flows, as well as how the chemical reaction creates an eruption.

NOTE: You may alter the ratios of the ingredients to create different variants of eruptions.



VOCABULARY

ERUPTION: (Of a volcano) become active and eject lava, ash, and gases.

LAVA: hot molten rock erupted from a volcano or fissure.