

Assignment

Instructions :

1. You have the option of working as an **individual** or working in **groups of (2's) to construct a volcano. (Both group members must contribute)**
2. Your volcano may be “**active**” “**dormant**” or a “**extinct**”. It must be a 3D model. It must represent one of the following types of volcano:- **Ash and Cinder Cone, Composite Cone or Shield.**
3. You will present your volcano to the class as part of your grade.

Grading Scheme

- ◆Creativity {colours, volcanic features, landscape, eruption type} 10 points
- ◆Presentation {knowledge of volcanoes & features present (labels), neatness} 10 points

- **Use whatever materials you have at home to build your model.**

How to Build a Volcano (This is only a suggestion)

1. First make the 'cone' of the baking soda volcano. Mix 6 cups flour, 2 cups salt, 4 tablespoons cooking oil, and 2 cups of water. The resulting mixture should be smooth and firm (more water may be added if needed).
2. Stand the soda bottle in the baking pan and mold the dough around it into a volcano shape. Don't cover the hole or drop dough into it.
3. Fill the bottle most of the way full with warm water and a bit of red food color (can be done before sculpting if you don't take so long that the water gets cold).
4. Add 6 drops of detergent to the bottle contents. The detergent helps trap the bubbles produced by the reaction so you get better lava.
5. Add 2 tablespoons baking soda to the liquid.
6. Slowly pour vinegar into the bottle. Watch out - eruption time!

◆What You Need

- 6 cups flour
- 2 cups salt
- 4 tablespoons cooking oil
- warm water
- plastic soda bottle
- dishwashing detergent
- food coloring
- vinegar
- baking dish or other pan
- baking soda
- **Other Materials:** rocks, sand, ash, pebbles (depends on the type of volcano), newspaper etc

MATERIALS MAY VARY DEPENDING ON THE TYPE OF VOLCANO YOU ARE BUILDING

THESE ITEMS ARE JUST THE BASIC THEREFORE YOU ARE NOT LIMITED (**NO HIGHLY EXPLOSIVE ITEMS**)

USE WEB FOR ADDITIONAL INFORMATION

Adopted from: <http://chemistry.about.com/cs/howtos/ht/buildavolcano.htm>