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DIRECTIONS TO MAKE (1 of 2) YOUR OWN VOLCANO

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1-2 hours + drying time + questions and journal time

Follow all safety instructions from LearnLibre.com during the experiment.



Before the Experiment

Find a safe and appropriate place to do the experiment, get any safety equipment you will need, and gather your materials on a tray.

Materials

- 3 cups flour
- 1½ cups salt
- 1¹/₂ cups water
- Large mixing bowl
- Empty beaker or cup
- 5mL (1 tsp) baking soda

- 60mL vinegar
- 3-5 drops liquid dish soap
- 3-5 drops red food coloring
- Baking pan covered in foil
- Suggested: black, red, and orange acrylic paint + paint brushes to decorate

Procedure

Part 1

- 1. Mix flour, salt, and water in a large bowl until it turns into dough.
- 2. Mold your dough into the shape of a volcano around the empty beaker (do this on the foilcovered baking sheet so you do not have to move it later).
- 3. Pull the plastic beaker out of the volcano, and reshape as needed.
- 4. Let the volcano dry.
 - Option 1: Leave the volcano out on the counter for a few days.
 - Option 2: Bake the volcano at 250 °F for 2-4 hours in the oven.
- 5. Paint the volcano & let it dry completely (optional).

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DIRECTIONS TO MAKE (2 of 2) YOUR OWN VOLCANO

Part 2

- 1. If it is not already, put your volcano into a baking pan or bowl.
- 2. Pour baking soda, liquid dish soap, and red food coloring into the center of the volcano.
- 3. Mix them together.
- 4. Pour the vinegar into the center of the volcano.
- 5. Repeat if you want!

Questions

- 1. What happened when you mixed the baking soda, soap, and food coloring together? What happened when you added the vinegar?
- 2. Are there any parts of this experiment you could change to cause a different outcome?
- 3. How is this similar to what happens in a real volcano? (Hint: think back to The First Great Lesson)
- 4. You just made a volcano out of salt dough. What are real volcanoes made of?
- 5. Are there volcanoes where you live? Are you sure? (Hint: look up dormant volcanoes)
- 6. Why do volcanoes form in some places, but not others?

See answers by scanning the QR code at the top of the 1st page.

Clean-up

Wash and dry any tools you used, put materials back where you got them from, clean your work station.



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