Volcano Experiment

Explore Earth's hot core with this outdoor science experiment!

Materials Needed:

Glass jar (or plastic cup), 5 tablespoons baking soda, 2 teaspoons dish soap, 1 ½ cups water, red food coloring or tempera paint, 1-2 cups vinegar. You will also need an outdoor area with soil, gravel, or sand.

Instructions:

Step 1: Choose an area outside. Pile soil, gravel, or sand up to make a mound. This will be your volcano.

Step 2: In your jar or cup, mix 1 ½ cups water, 5 tablespoons baking soda, 2 teaspoons dish soap, and a few drops of red paint or food coloring.

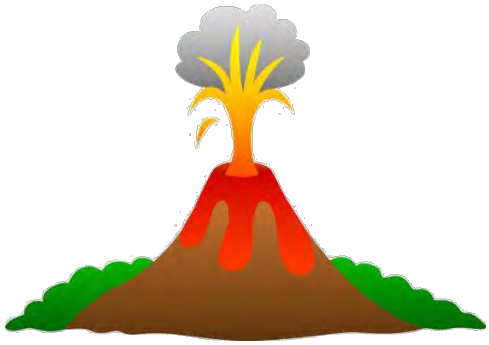
Step 3: Make a small hole at the top of your volcano. Place the jar or cup inside with the top open.

Step 4: Pour 1 cup of vinegar into the jar and enjoy the volcanic eruption! Pour more vinegar and add more baking soda to make a second eruption and prolong the fun.

Image: Preschool Inspirations.

Activity adapted from preschoolinspirations.com/easy-baking-soda-and-vinegar-volcano-eruption-for-kids/

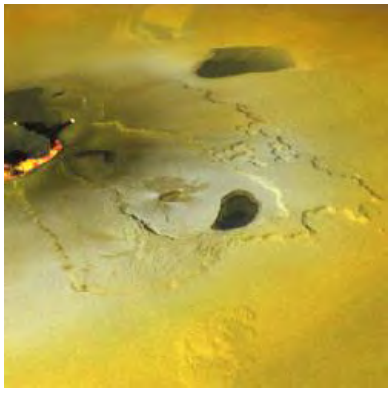
Volcanoes of the Solar System



The inside of the Earth is very hot. There is a layer of molten rock under the surface called **magma**. A **volcano** is an opening on the planet's surface where this hot magma can come out. Volcanoes can erupt or explode. The Earth has about 1500 possible active volcanoes. About 500 of these have erupted since people began keeping written records.

In 1979, NASA's Voyager 1 probe took a picture of Io, one of Jupiter's moons, and discovered an active volcano on its surface. This was the first volcano discovered outside of Earth. Since then, scientists have discovered many more volcanoes in the Solar System, on both planets and moons.

Our neighbor planet Venus has more volcanoes on its surface than any other planet in the Solar System. Mars has the largest known volcano. Olympus Mons is almost 3 times higher than Mount Everest, the tallest mountain on Earth!



Left: Volcanic eruption on Io in 2000. Image: NASA/JPL.

Right: Olympus Mons on Mars. Image: NASA/Viking Orbiter.

Discover more about volcanoes in the Solar System:

spaceplace.nasa.gov/volcanoes2/en/

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