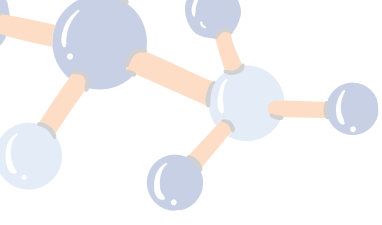


PUMPKIN VOLCANO ERUPTION



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Learn about how different
substances can react
together to create
fascinating results!



The Science Behind the Experiment:

This experiment demonstrates an acid-base **reaction** between baking soda (a base) and vinegar (an acid). When combined, they produce **carbon dioxide** gas, which creates the bubbling and fizzing effect. The food colouring and dish soap enhance the visual and bubbly effect, making it look like lava erupting from a volcano. By watching the pumpkin erupt, children can see how chemical reactions work in a simple and exciting way. It helps them understand basic concepts like reactions and gases while providing a hands-on and interactive experience.

We're going to make a pumpkin volcano! First, we put some baking soda inside the pumpkin, then we mix vinegar and washing up liquid with some red and yellow colouring to make it look like lava. When we pour the vinegar into the pumpkin, it will bubble and fizz like a real volcano, and it will look like lava is exploding out! It's like a fun way to see how volcanoes erupt!

Definitions

Reaction: When two or more substances combine and create a change, like bubbling.

Carbon Dioxide: A gas that forms during this reaction and creates bubbles.



Materials:

- Small pumpkin (or mini pumpkin)
- Baking soda
- Vinegar
- Red and yellow food colouring (optional, for lava effect)
- Dish soap (optional, for extra bubbles)
- Large tray or baking sheet
- Small cup or container (for mixing)
- Spoon or small scoop



Pumpkin Volcano Eruption

Instructions:

1. Cut off the top of the pumpkin and scoop out the seeds and stringy insides. You should be left with an empty pumpkin shell (you can also carve the pumpkin if you wish). Place the pumpkin on a large tray or baking sheet to catch any spills.
2. Spoon a few tablespoons of baking soda into the bottom of the pumpkin. You can add more if you want a bigger eruption.
3. In a small cup or container, mix vinegar with a few drops of red and yellow food colouring (for a lava effect) and a small squirt of dish soap (for extra bubbles).
4. Pour the vinegar mixture into the pumpkin over the baking soda. Watch as the mixture starts to bubble and fizz, creating a fun eruption effect!
5. Observe how the bubbling action mimics a volcanic eruption. Talk about why the bubbles happen and what is causing the eruption.