

FOAMING VOLCANO!

MATERIALS:

- empty soda bottle
- cap from soda bottle
- vinegar
- baking soda

PROCEDURE:

1. Fill the soda pop bottle half full with vinegar.
2. Add 2 teaspoons of baking soda.
3. Quickly press a cap down on the top of the bottle.
4. Step back and watch.
5. Record your observations.
6. Try replacing the cap again.
7. Record your observations.
8. Give the bottle a little shake.
9. Record your observations.

QUESTIONS:

1. Why does the top pop off the bottle?
2. Do you know what we call the "gas" you made?
3. What other acids could you mix with baking soda to create carbon dioxide?

Why it works: When you combine vinegar (an acid) with baking soda (a base), carbon dioxide gas is formed. (This is a chemical reaction.) The carbon dioxide gas popped the cap off.

**Try this experiment again using fruit juice, lemon juice, milk, water. Which ones are acids?