Science Experiment Steam Cone

In this great experiment, you'll build a volcano based on earth science and chemistry. It's definitely something to get all steamed up about! It's simple, easy, and you won't need a lot of materials. So, what are you waiting for? (Caution! Throw away all chemical solutions and thoroughly wash out all containers when you're finished.)

YOU WILL NEED:

- strip of lightweight cardboard 8cm X 20cm
- small, empty, clean container like a spice jar or vitamin bottle
- scissors
- paper clip or tape
- flat tray or pan
- ½ tablespoon of quick-rising yeast
- ½ cup of vinegar or hydrogen peroxide
- metal spoon

WHAT TO DO

With the cardboard strip, form a cone shape that will fit over the small container and fasten it with the paper clip or tape. Cut the end corners off so the cone will stand upright in the tray or pan. Place the small bottle or jar in the tray and get ready for action.

The jar should be large enough to contain the vinegar but fit under the cardboard cone or extend slightly above the cone's mouth. With the cone over the small container, pour in the vinegar followed by the quick-rising yeast. Stir the mixture thoroughly. (if it is easier, you may place the cone over the bottle after stirring, but you must be quick!) Continue to stir the mixture, for best results, until the experiment is finished.

WHAT HAPPENS

The mixture of vinegar and yeast causes foam, steam, and a hissing noise to come from the cardboard "volcano."

WHY

The ingredients placed in the container under the cone produced a chemical reaction, or change. It is called exothermic because, in addition to foaming, steaming, and hissing, heat is given off. If you touch the rim and sides of the container or the stirring spoon you can feel this warmth.

In a real volcano, hot melted rock called magma, deep within the earth, erupts or shoots through fissures or cracks. This moving rock, known as lava, sometimes flows from openings in the volcano's sides, or explosively shoots or blows out steam, smoke, ash, and rocks. Although your model volcano is small and simple, it does give you a good idea how a real volcano erupts.

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