



WACKY SCIENCE EXPERIMENTS

Paper Mache Volcano! With a Baking Soda and Vinegar Explosion!

What you will need to properly conduct the experiment!

For Volcano – You will need:

Mixing Bowl

Flour

Water

Newspaper and 4 Pieces of Wooden Planks

2L bottle

Various Paint Colours

Modge Podge (not necessary if volcano is meant to only erupt once.)

For Explosion – You will need:

Mixing Bowl and Cup

3 tbsp of Baking Soda

3 tbsp of Dish Soap

6 tbsp of Water

1 ½ cup of Vinegar

Red Food Colouring



Instructions

How to make the Volcano and the Base:

- 1) Cut off the top of the 2L bottle to create a larger opening.
- 2) Tape 4 pieces of wood to the 2L bottle, this will create a pyramid like structure.
- 3) In the spaces between the bottle and the pieces of wood crumple up pieces of newspaper to fill the gaps.
- 4) Cut up the remainder of the newspaper into 2-inch-thick strips.
- 5) Mix the flour and water in a ratio of 1 part flour for every 2 parts water. This creates the Paper Mache mix.
- 6) One at a time, dip the strips of newspaper into the Paper Mache mix, and place the around the wooden pieces.
- 7) Continue step 6 until the entire volcano structure is covered.
- 8) Leave the volcano to dry for at least 24 hours! It should be dry and hard to the touch!
- 9) Once the Paper Mache is hard to the touch, use the paints of your choice to paint your desired design.
- 10) Leave until the paint is dry.
- 11) If you want to use the volcano for multiple occasions use Modge Podge to create a waterproof barrier. Paint on at least 2 layers and leave for 12 hours to dry in between each layer.

How to make the Volcanic Explosion:

- 1) In a mixing bowl, mix the baking soda, water, dish soap, and the desired amount of red food colouring. Ensure everything is mixed together.
- 2) Pour the mixture into the volcano. Make sure that there is nothing left over in the mixing bowl.
- 3) Move the volcano outside.
- 4) Once ready, pour the vinegar into the volcano, the eruption will start very quickly!
- 5) Enjoy your explosion!



WACKY SCIENCE EXPERIMENTS

Tornado in a Bottle

What you will need to properly conduct the experiment!

2 – 2L bottles (empty)

Water

A Metal Washer

Duct Tape

Glitter/Food Colouring

Instructions

- 1) Take off the caps of the 2L bottles. You will not need them.
- 2) Fill one bottle $\frac{3}{4}$ of the way full of water. Add the desired amount of food colouring/glitter.
- 3) On top of that bottle place the metal washer and use the duct tape to secure it to the bottle.
- 4) Place the other empty 2L bottle upside down on top of the washer.
- 5) Use lots of duct tape to ensure that neither of the bottles will move. They need to remain together.
- 6) Turn the bottles upside down and holding the connection point, spin them around quickly. This will create a vortex, which will create the illusion of a tornado in a bottle.



WACKY SCIENCE EXPERIMENTS

Rainbow in a Jar!!

What you will need to properly conduct the experiment!

You will need:

- Red, blue, and green food colouring
- Light corn syrup
- Blue Dawn Dishsoap
- Water
- Olive Oil
- Rubbing Alcohol
- 5 cups, and a big jar!

Instructions

Putting it All Together:

- 1) In cup 1, mix purple (red and blue) food colouring with $\frac{1}{2}$ cup of light corn syrup.
- 2) In cup 2, measure $\frac{1}{2}$ cup of blue dawn dish soap.
- 3) In cup 3, pour $\frac{1}{2}$ cup of water, and mix with green food colouring.
- 4) In cup 4, measure out $\frac{1}{2}$ cup of olive oil.
- 5) In cup 5, mix $\frac{1}{2}$ cup of rubbing alcohol and mix with red food colouring.
- 6) In order of cup number, carefully pour into the big jar. As the different liquids get poured into the big jar, they should not mix, but rather look like separate layers - making it look like a rainbow!!