

Make a Tornado in a Bottle

Learn how to make a tornado in a bottle with this fun science experiment! Use easy to find items such as liquid dish soap, water, glitter and a bottle to make your own mini tornado, one that's a lot safer than what you might see on the weather channel. Follow the instructions and enjoy the cool water vortex you create!



YOU WILL NEED:

1. Water
2. A clear plastic bottle with a cap (that won't leak)
3. Glitter
4. Liquid dish soap

INSTRUCTIONS:

1. Fill the bottle about three quarters full of water.
2. Add a few drops of dish soap.
3. Sprinkle in a few pinches of glitter (this will make your tornado easier to see).
4. Put the bottle cap on tightly.
5. Turn the bottle upside down and hold it by the neck.
6. Quickly spin the bottle in a circular motion for a few seconds, stop and look inside to see if you can see a mini tornado forming in the water.

Tip: You might need to try it a few times before you get it working properly.

WHAT'S HAPPENING?

Spinning the bottle in a circular motion creates a water vortex that looks like a mini tornado. The water is rapidly spinning around the centre of the vortex due to centripetal force (an inward force directing an object or fluid such as water towards the centre of its circular path).

Did you know vortices can be found in nature? Tornadoes, hurricanes and waterspouts (a tornado that forms over water) are all examples of natural vortices.