

Tornado in a Jar

Tornados are one of the most destructive and dangerous types of severe weather. They are made of air that spins and rotates very quickly and creates a funnel. When a tornado touches the ground, it can even destroy sturdy objects like large trees and buildings. Today, you'll create a safe tornado model. A model is something we use as an example.



Materials:

- A Jar with Lid
- Water
- Measuring Spoons
- Dish Soap
- Vinegar
- Food Coloring (Optional)

Procedure:

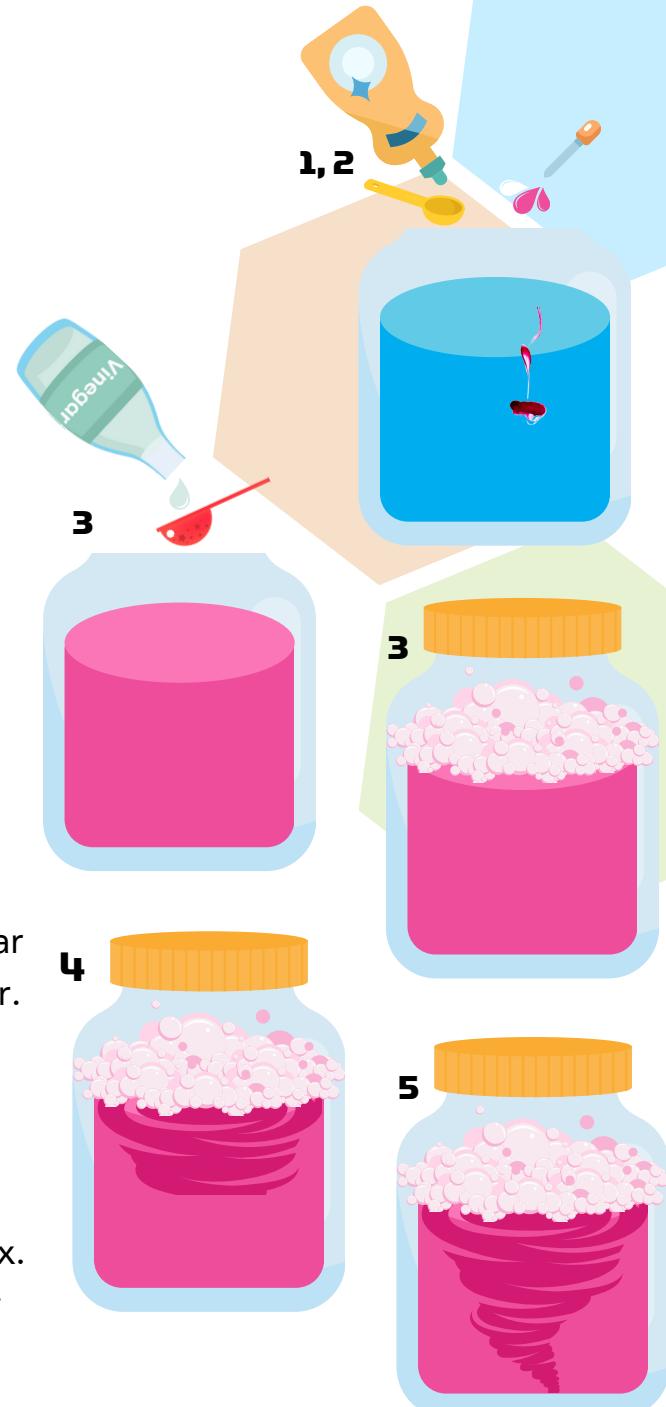
1. Fill your jar with cold water, leaving 1 – 2 inches of space from the top. If you are using food coloring, add it in now – just a couple drops.

2. Add 1 tablespoon of dish soap to your jar.

3. Add 1 teaspoon of vinegar to your jar. Then, place the lid on your jar and mix gently. It's okay if some bubbles form, but try not to have too many.

4. Once your ingredients are combined, hold the jar and swirl it until you see a shape forming in your jar.

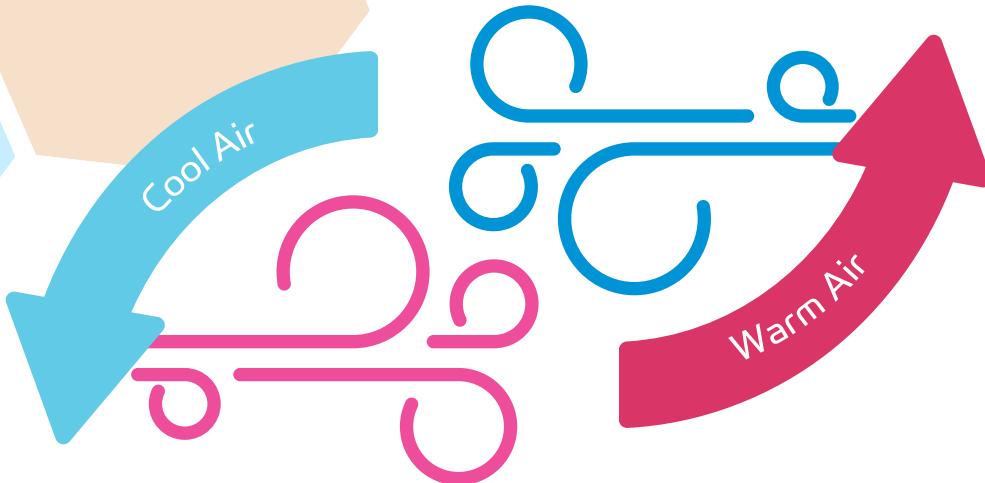
5. Stop swirling your jar and observe what is inside your jar. You've made a tornado – or a water vortex. *Tip: If your jar has too many bubbles and you can't see your tornado, open the jar, scoop some of the bubbles out, and place the lid back on!*



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WHAT'S HAPPENING?

Tornados are formed when warm humid air and cold dry air crash together. When the cold air is pushed over the warm air, the warm air rises and creates an updraft.



If there are winds that change quickly in direction or speed, that causes the updraft to begin turning and begins the funnel. A tornado is only called a tornado once it touches the ground.



DID YOU KNOW?

A **meteorologist** is someone who studies the atmosphere. We mostly know them as weather forecasters, but that's not all they do. If you liked this activity, maybe meteorology is for you!