Homemade Tornado

Any child who has seen a tornado in real life or on TV knows that they are both scary and fascinating. Help your child harness the awesome power of this meteorological phenomenon by recreating a tornado vortex in the safety of your kitchen. All you need are a few simple household materials.

What You Need:

- Duct tape
- 2 empty plastic 2-liter bottles
- Water
- Paper towel
- One metal washer the same size as the bottle's opening

What You Do:

1. Remove the plastic rings from both of the two-liter bottles. You may need to cut them off with scissors.
2. Have your child fill one bottle halfway with water.
3. Wipe the mouth of the bottle dry with the paper towel.
4. Cover the bottle's top with the metal washer.
5. Invert the second (empty) bottle over the first.
6. Help your child tape the bottles together with the duct tape.
7. Flip the bottles over so that the filled bottle is on top and the empty bottle is on the bottom.
8. Have your child hold one bottle in each hand to keep them steady, or have your child hold the top bottle while you hold the bottom bottle secure.
9. Gently swirl the water inside the upper bottle in a circular motion. What happens?
10. Ask your child why the water in the upper bottle formed a funnel shape.

What Happened?

When you spun the top bottle, the water inside began to move in a circular motion, pushing outward against the side of the bottle. As the water pushed outward, a small hole opened up at the bottom, allowing air from the bottom bottle to move up into the top bottle. The air entering the top bottle caused the vortex to form.

Fun Tornado Facts:

Tornadoes can have wind speeds of up to 250 miles per hour and can be as tall as 50,000 feet!

Because a tornado is composed only of wind, which is invisible, you can only see it because of the dust and debris that it picks up as it moves along the earth's surface.

Most tornadoes spin clockwise in the southern hemisphere and counterclockwise in the north because those are the usual directions of the thunderstorms that spawn them.