

Zedua Experiments

Title: Make a Tornado in a Bottle

What is a tornado?

Tornadoes are violent storms that strike as a powerful rotating mixture of wind and thunderstorm clouds, extending from the clouds to the ground in a funnel shape.

What is centripetal force?

A force which acts on a body moving in a circular path and is directed towards the centre around which the body is moving.

Let the kid have fun by making a tornado in a bottle.

Materials Required:

1. Water
2. A clear plastic bottle with a cap (that won't leak)
3. Glitter
4. Dish washing liquid

Procedure:

1. Fill the plastic bottle with three quarters water.
2. Add a few drops of dishwashing soap liquid.
3. Add a few pinches of glitter (this will make your tornado easier to see).
4. Put the cap on tightly.
5. Turn the bottle upside down and hold it by the neck.
6. Spin the bottle vigorously 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. Try few more times till you see the tornado properly.

What's happening?

Spinning the bottle in a circular motion creates a water vortex that looks like a tornado. The water is rapidly spinning around the center of the vortex due

to centripetal force. Vortexes found in nature include tornadoes, hurricanes and waterspouts (a tornado that forms over water).



Source: pintrest

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