

# Tornado in a Bottle

## Materials

- Two empty two-liter soda bottles
- A flat washer (big enough to cover the mouth of the bottle)
- Plenty of duct tape
- Optional - “debris” for your tornado such as bits of cork or glitter.

## Materials

- Fill one of your bottles 2/3 full of water and add just a few drops of dish soap to make your vortex more visible. Now’s the time to add a dash of “debris” if you like - try little pieces of a cork (make sure they fit through the hole in your washer!) or a bit of glitter.
- Place the washer on the mouth of your water-filled bottle, then turn the empty bottle over and place it on top. Connect both bottle necks and the washer with a healthy amount of duct tape.
- Turn your creation over! What happens? You should see a drip, drip, drip as air bubbles work their way up through the hole. Turn it over again.
- What if you give the bottle a good spin (it’s a little bit like mixing batter for a cake... you’ll get the hang of it!). Did you see a vortex? Which way empties the bottle faster - spin or no spin?