

Dear Porsche,
Tornadoes droppeth from above, but not at all gentle. *(Excuse me, I guess that's kind of all Shakespeare. Your name reminds me of Portia from one of his plays.)*

But back to tornadoes. You know, a kind of tempest.

You Can make a model of a tornado to see how they work. They get their power by concentrating stuff.

Jax Place
Jax Place

Experiment #1

WHAT YOU NEED: A dirty body - focused attention

WHAT TO DO:

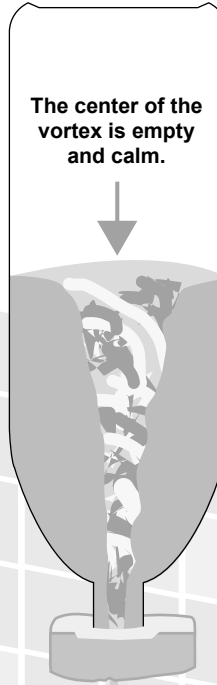
Well, take a bath to get rid of that dirt, and to pay attention to something that will happen when you pull out the tub's plug. Oh, yes. Pull out the plug and sit there still, focused on the tub's drain.



SO WHAT: A whirlpool will form as the water drains out. Your bathing added motion to the water, and when the water left the tub, that motion had to go somewhere. It won't just disappear because nothing ever disappears. The whirlpool is the motion that was spread out in all

the water, concentrated to a very small area. That's an important part of funnel clouds like tornadoes and hurricanes. Motion in air, spread out over hundreds of miles, is concentrated to a tiny spot, the funnel cloud, and that makes the winds blow furiously fast.

Experiment #2



Make the hole in your potato this big.

Push it into the mouth of the bottle like a stopper. Push only halfway through the potato. Remove the bottle and remove the little plug of potato the bottle made. Gently push the straw through the rest of the potato to make a hole all the way through.

Fill the bottle 3/4 full of water. Put on your potato stopper and put your finger over the hole. Turn the bottle upside down. Give the bottle a bit of round-and-round motion, and remove your finger from the hole. A beautiful vortex will form.

SO WHAT: Storms work this way too. Motion spread out over hundreds of miles is concentrated in the tornado's vortex.

WHAT YOU NEED:
Empty 2-liter plastic soda bottle - potato - soda straw

WHAT TO DO:

Ask a grown-up to make a slice of potato for you, about 1 inch thick.

P.S. from Jax: Here's a quote we like. Be great in act, as you have been in thought. - William Shakespeare It means, do stuff. Don't just think about it. Or, do the experiments. Don't just read about them.

