

Name:

Date:

Activity 2.4

Twister In A Bottle



Objectives:

To simulate the shape and motion of a tornado.
To research where and when tornadoes occur.
To research safety precautions when tornadoes are imminent.

Materials:

- Two 2-liter plastic bottles with caps (with a 1/2 inch matching hole) or a tornado tube
- Small pieces of paper, sand or soil, or glitter
- Drop of dish soap or other small objects
- WEATHERlogs

Procedure:

1. Fill one 2-liter bottle 2/3 full with water.
2. Attach the caps and tape them securely. Make sure the holes line up. (The bottles can be lined up without their caps, but a tight, secure fit which does not allow water to escape is more difficult using this method.) Or attach the tornado tube to each of the bottles.
3. With the water on top, twist the bottle by moving your arms in a large circular motion.
4. Record your observations.
5. Place the different substances you have been given in the bottle, one type at a time. Make the same twisting motion and record your observations.
6. Repeat the procedure several times with the different items and the plain water. Record any additional observations in your WEATHERlogs.

Observations and Conclusions:

Compare your observations with the tornado that you observed in the video. Note in your WEATHERlog how they are the same? How are they different?

Use the LIVE FROM THE STORM web site to answer the following questions:

- Where is Tornado Alley located?
- What time of the year are tornadoes most likely to develop?
- What time of year are tornadoes most likely to occur in your area?