

**Project FOCUS  
Best Lessons  
KINDERGARTEN**

**Title of Lesson:** Tornado in a Bottle

**Theme:** Earth/Space Science

**Unit Number:** 2      **Unit Title:** Motion, Movement and Gravity

**Performance Standard(s) Covered (enter codes):**

SKCS4

**Enduring Standards (objectives of activity):**

**Habits of Mind**

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

**Content (key terms and topics covered):**

Water, tornadoes

**Learning Activity (Description in Steps)**

**Abstract (limit 100 characters):** The purpose of this activity is to teach students the effects of water.

**Details:** Fill the water bottles with water before coming to class and label the caps with students' names/initials. Each student will receive his/her own water bottle filled with clear water. Explain to the students that they will be making a tornado in a bottle with all sorts of fun and colorful things inside the bottle.

Each student will choose what color to dye their water (you can incorporate what primary colors are used to make secondary colors). Place about one to two drops of dye into each student's bottle, close the cap tightly, and allow them to shake the bottle so that they can see the color change.

Then allow the students to choose what types of confetti, glitter, and other objects they would like to place in their bottles (but don't let them put too much or it will be too heavy).

Once each student is satisfied with the contents of their bottle, close the caps tightly and tell the students to shake their bottles in a circular motion. The circular motion will cause the water and all the particles inside to rotate in a circular motion, thus causing a small tornado in a bottle.

**Materials Needed (Type and Quantity):**

Plastic water bottles filled with water and leaving about 3 inches of the top of the bottle empty (have one bottle per student)

Food coloring (red, blue, yellow)

**Glitter**

**Plastic confetti**

**Sequence pieces**

**Colorful sand or anything small and colorful to place in the bottle**

**Notes and Tips (suggested changes, alternative methods, cautions):**

**Make sure the students do not eat the small pieces or drink the water. Also, prior to allowing the students to shake their bottles, make sure that the cap is tightly closed on the bottle to avoid any spills.**

**Sources/References:**

**1)**

**2)**

**3)**