

**Project FOCUS
Best Lessons
KINDERGARTEN**

Title of Lesson: Gravity

Theme: Physical Science

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

Performance Standard(s) Covered (enter codes):

SKP3- Students will observe and communicate effects of gravity on objects

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):

Gravity

Learning Activity (Description in Steps)

Abstract (limit 100 characters): Students will visualize the force of gravity in a unique way.

Details: Begin by talking about gravity and explaining basic effects of gravity (airplanes, balloons, rain). Then after a basic explanation, begin the experiment. Place one of the plastic bottles on a table in front of the classroom and the other on any surface that is lower than the table that you will be using for the demonstration. Fill the bottle on the table halfway with water and add food coloring of your choice. Place one end of the clear tubing into the bottle with the food coloring and suck on the other end until the colored water is all the way at the end of the tube. Quickly place the tube into the bottle that is at the lower elevation. Allow the students to observe the water flow from the bottle on the top of the table to the bottle under it. Repeat this if necessary. Once the experiment is completed, ask questions such as: Does the water move up or down? What causes the water to move? Is the water pushed down or pulled down?

Materials Needed (Type and Quantity):

2 clear and empty plastic bottles (preferably 64oz)

Clear tubing (2 feet in length)

Tap water

Food coloring (any color)

Paper towels or rags

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

The only modification that I would recommend would be to do this in smaller groups (4-5). I feel like the attention that you would receive in a smaller group would be greater. Also, ask the questions that I asked (Does water move up or down?) before the experiment and have them make predictions. If you do this in the beginning, they will pay more attention throughout the rest of the experiment to see if they were right or wrong.

Safety:

Do not let the kids initiate the experiment (do not let them suck on the tubing). You do not want any kid to swallow colored water and possibly choke.

Sources/References:

- 1) Friend**
- 2)**
- 3)**