



## Will it Float?

**Grade Level:** PreK - K

**Time:** 30 minutes

### Program objectives:

- Students will be able to understand that air and weight (mass) will determine an object's buoyancy.
- Students will learn what causes some things to float and others to sink and predict outcomes based on those principles.
- Students will discover if water is heavy or light.

### Program description:

What keeps a boat afloat? Is water heavy or light? Does air have anything to do with floating? Experiment with the basic principles of water as you test a variety of objects that either sink or float.

### Major vocabulary and concepts:

Buoyancy  
Float  
Predict

Different  
Heavy  
Same

Experiment  
Light  
Sink

### Suggested pre-visit activities:

- Scale introduction – Use a platform scale to weigh objects in your room. Some weigh more than others. Let the students predict which objects will weigh more.
- Introduce boats into the classroom. Place boats in your water table, draw pictures and add boat stories to story time and to your reading corner.
- Introduce the concept of what things are made of showing examples of plastic, metal, wood and more. Give students an assortment of objects made from different materials. Have the students separate the objects based on what they are made of (i.e. plastic, metal, wood, cloth, etc.).



**Suggested post-visit activities:**

- Visit the *Water Works* exhibit in the Duke Energy Children's Museum.
- Reinforce concepts of sinking and floating and buoyancy with a water table or tub.
- Have a boat day theme where everything revolves around boats including snacks, stories, playground time, etc.
- Continue this experiment in the classroom allowing students to test different objects. Keep a running list of "floaters" and "sinkers" as you run the experiment with new objects.
- Give each student a sheet of paper with a bowl of water outlined on the sheet. Ask the students to draw pictures of the objects that were placed into the water - drawing those that floated at the top of the water line and those that sank at the bottom of the bowl.

**Academic Standards:**

Ohio Revised Academic Standards:

- Physical Science – PreK and K

**Related exhibits and features:**

- *Water Works* exhibit in the Duke Energy Children's Museum

**Resources:**

- [Boats on the River](#), by Peter Mandel
- [Row Row Row Your Boat](#), by Iza Trapani
- [Get Ready to Sail: Build and Float Soft Shapes](#), by Ikids
- [The Magic School Bus: Ups and Downs, A Book About Floating and Sinking](#) by Joanna Cole
- [Let's Try it Out in the Water](#) by Seymour Simon and Nicole Fauteux
- [Floating and Sinking \(First Facts, Our Physical World\)](#) by Ellen S. Niz
- [What Floats? What Sinks? A Look at Density](#) by Jennifer Boothroyd

