Sink or Float

Thank you for your interest in this *The Cat in the Hat Knows a Lot About That* Ready to Learn backpack. The education team at Iowa PBS is excited that you have chosen to enrich your child's learning.

Contents

4 Books:  
- *What Floats in a Moat?* by Lynne Berry  
- *Does It Sink or Float?* by Susan Hughes  
- *What Is Science?* by Rebecca Kai Dotlich  
- *Water Can Be* by Laura Purdie Salas

Activity: Cat in the Hat: What Floats Your Boat?

Materials: Sink or Float Activity set—a set of items that may be used to explore why similar objects may sink or float

Controlling Variables

When engineers run tests, only one variable is changed at a time. If you change too many things at once, it is hard to know what change made a difference in your test. At this age, it may be difficult for a child to just change one variable. If they are frustrated with too many things changing, you can ask “What do you think helped your boat work? How do you know?” This line of questioning can help direct them to think about if a change worked or not. Ask questions such as:

- Tell me why you made your boat this shape?
- What did the first boat do when you tested it?
- What did you decide to change for the next boat?
- Why did you change that?
- What did the second boat do when you tested it?

Play Together

Playing with your child can be fun for them and for you, and asking questions will help your child learn.

- After watching *The Cat in the Hat Knows a Lot About That: Whatever Floats Your Boat*, use one type of material, such as aluminum foil, to create different shaped objects. How does changing the size help an object float better? How does changing the shape affect its floating abilities?
- Use the STEM activity set in a sink or water table to experiment with various materials using similar shapes. You can also experiment with items in the activity set and from around the house. Which items float easily? Which items float the longest? Which items sink quickly? Which items float until they're soaked with water?
- Make predictions about objects found outside: leaves, rocks, sticks, sand or dirt. Why do some of the objects sink while others float? Will a very large log float? Make observations using multiple senses and apply knowledge from the observations to make claims or decisions.

Online Activities

Go to [iowapbs.org/education/story/36383/science-resources-and-activities-ages-4-8](http://iowapbs.org/education/story/36383/science-resources-and-activities-ages-4-8) to watch *The Cat in the Hat Knows a Lot About That: Whatever Floats Your Boat* and *Young Explorers Read Good Books!: Foil Boats*. You can also use the PBS Parents Play and Learn Science app to discover more about sinking and floating.

Find more information about Iowa PBS Education at [iowapbs.org/education](http://iowapbs.org/education). More PBS educational content can be found at [pbskids.org](http://pbskids.org).