



**Editor's Note:**  
Most people have decorated a pumpkin. But how many have ever ridden inside one? These zany boats are made from giant pumpkins. How do they grow? And what makes a pumpkin float? Find out inside this pumpkin-packed issue.

—Matt Sheehy

**Reading Objective:** Learn how people grow giant pumpkins and turn them into boats.

**Next Generation Science Standards:**

**LS.1.B: Growth and Development of Organisms**

**National Science Education Standards:**

**Life Science: Life cycles of organisms**

**Vocabulary:** bobbing, sprout, vine

## LESSON PLAN

### Before Reading

Set a Purpose Through Questioning (RI.2.1)

A “wonder list” is a strategy to help students set a purpose prior to reading. Think aloud, “Just looking at the cover, I am wondering several things. For example, I wonder if those boats are safe. Let me add my wondering to our Wonder List chart . . .” Look at the cover and the photographs together, and invite students to share their own wonderings to add to the chart. After each one, ask students who shared the same wondering to give a thumbs up. Afterwards say, “As we read this article, we’ll be on the lookout for answers to our wonderings.”

### During Reading

Using a Diagram for Clarification (RI.2.7)

- Lead a discussion about how the pumpkin life cycle sidebar supports specific parts of the article: “Sometimes authors provide illustrations or diagrams to help us understand a certain part of a text. Let’s look at the sidebar on the bottom that shows how a pumpkin grows. The sidebar goes with some parts of the article. Let’s read paragraph one and think about whether the sidebar supports this paragraph. Why or why not?”
- Read through each paragraph and discuss which ones the sidebar supports. (paragraphs 2 and 3)
- Then model for students how to link each step in the sidebar with a specific sentence or phrase in the article. “Step one shows the seed sprouting. In paragraph two, the author writes that the seeds sprout into vines. This sentence goes with step one in the sidebar. I’ll write a No. 1 next to that sentence. Let’s try step two together. . . .”

### After Reading

STEM Activity: Will It Float? (2-PS1-1)

Materials: large bin or tank (clear is better) partly filled with

water, assorted fruits and vegetables, reproducible work sheet from this Teacher’s Guide

Sinking or floating is an observable property of matter. “In the article, we learned that pumpkins float because they are filled with a lot of air, which is lighter than water. What about other fruits and veggies?” Fill up a bin with water, bring in a sampling of produce, and find out! (Hint: apples, pears, bananas, lemons, oranges, and squash will float; avocados, mangos, grapes, and potatoes will sink.)

For each item, ask students to predict whether it will sink or float. Have students record their predictions on the work sheets from this Teacher’s Guide, then test them.

Tip: This activity works well as a whole-class experiment. Alternatively, you can set up baskets of produce and smaller bins of water at each table and have students do the experiment in groups.

Fun Facts to Share!

- There are dozens of pumpkin boat races around North America.
- Most pumpkin boat races have two separate races: one for paddle-powered pumpkins, and one for pumpkins with motorized engines.
- Many people think pumpkins are a vegetable. They are actually a kind of squash, which makes them a fruit.

### Online Resources

[www.scholastic.com/sciencespin2](http://www.scholastic.com/sciencespin2)

Video: A Pumpkin Grows

Game: Pumpkin Boat Game Show



Your access code is: AL42VY

To reach the editor, email [sciencespin2@scholastic.com](mailto:sciencespin2@scholastic.com)





## Will It Float?



Name of Fruit or Vegetable	Prediction: Will it float?	Observation: Did it float?

shutterstock (fruits)

Does an object's size help you predict if it will float or sink?

Why or why not? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Why do you think some foods floated and others sank?

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\_\_\_\_\_

\_\_\_\_\_