

# What Floats Your Boat?



## WHAT YOU NEED:

- One 12-inch square of tin foil
- 40 pennies (or any mixture of coins)

## WHAT'S HAPPENING?

Buoyancy is the ability of an object to float when placed in a fluid. Surface area, the amount of space an object occupies, greatly affects the buoyancy of an object. A larger surface area allows the force (pennies) to be spread out over a larger area. This allows the boat to float even with the “cargo.”

## HOW TO:

1. Fold your tin foil into a boat. It can be any shape you like, as simple or as complex as you want.
2. Once your boat is ready, set it in the water.
3. How many pennies can you pile on your ship before it sinks?
4. Could you modify or change your design to support more coins?

## FUN FACT

Tin was the original metal used to make foil wrap. Aluminum proved less expensive and more durable, so it replaced tin. Some people still call aluminum foil “tin foil,” but it doesn’t have any trace of tin in it.

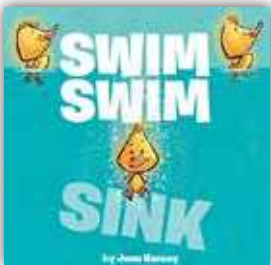
### Related Books:



*Boats (And Other Things That Float)* by Bryony Davies



*Boats will Float* by Andria Warmflash Rosenbaum



*Swim Swim Sink* by Jenn Harney

