



## FLOAT LIKE A BOAT

*What it takes to make an object float. This activity explores buoyancy – the ability of objects to float in a liquid.*

### What you need

- ball of plasticine (about 4 cm round)
- large bowl, dishpan or a sink
- water
- paper towels

### What to do

1. Pour water into a large bowl, dishpan or sink to about 8 cm deep.
2. Place the plasticine ball on the water.
3. Remove the ball and wipe it dry.
4. Using all of the plasticine form it into the shape of a canoe with a hollowed-out hull and a fairly flat bottom.
5. Place the canoe on the water.

### Observation

- Did the plasticine ball float or sink?
- Did the canoe float or sink?

### Why?

The shape and weight of an object affects whether it will sink or float. The plasticine ball was heavier than the water taking up the same volume and it sank. But when the ball is reshaped into a canoe, its volume includes the air within the hollow space of the canoe. Together the canoe and the air weigh less than the same volume of water, so the canoe floats.

### Did you know?

Aboriginal people began using this knowledge to build canoes over 1,000 years ago. They designed canoes of various shapes and sizes to carry large loads through rough waters. Historically, aboriginal people built their canoes using only natural materials. They did not use nails, screws or fiberglass.

### Web sites

The definitive site for information on canoes and how they shaped Canadian history.  
<http://www.canoemuseum.net/default.asp>

An excellent site for finding out about aboriginal teachings and legends.  
<http://www.schoolnet.ca/aboriginal/>

