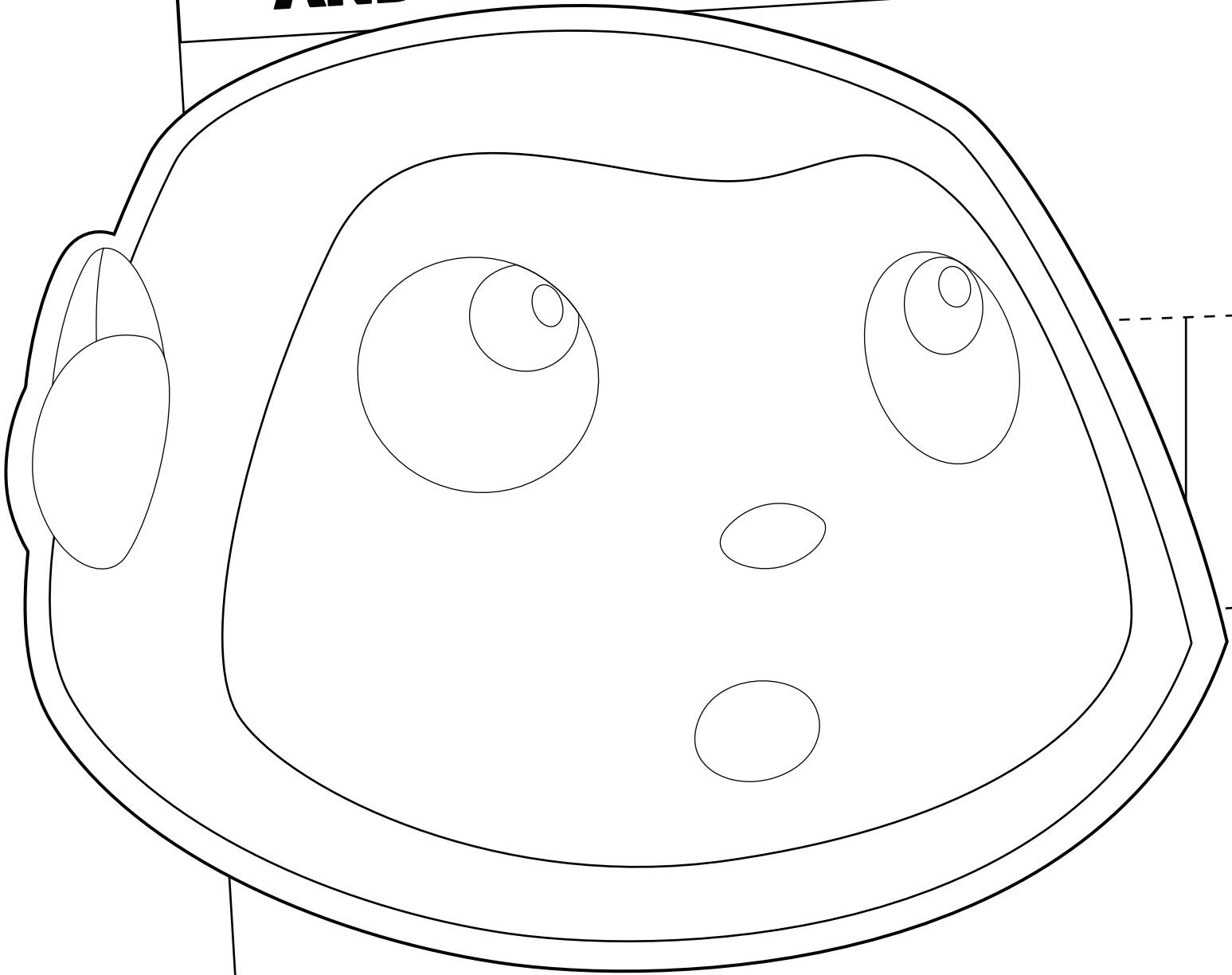


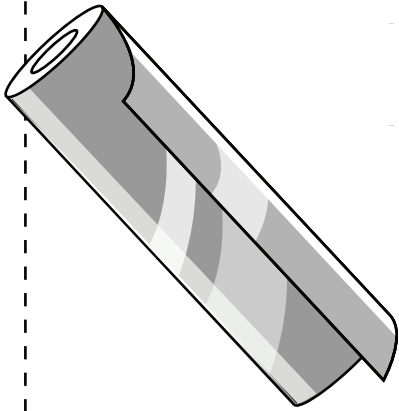
PAUL

AND THE SHIPWRECK



STEM ACTIVITY

WHAT YOU NEED



FOIL

... in various colors.

CARDBOARD

Use this to cut out the boat hull shape.

DRINKING STRAWS

Tape these to the cardboard to make a mast for your boat!

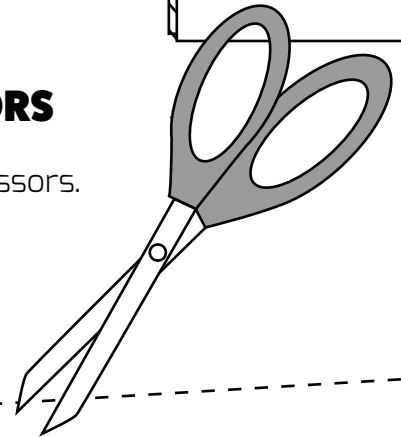


TAPE

To connect your mast to the cardboard.

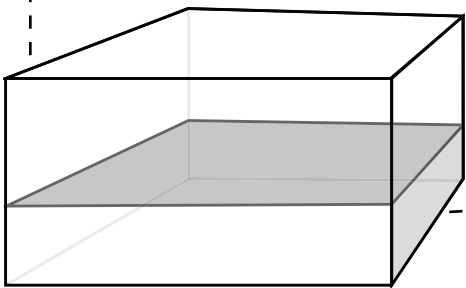
SAFETY SCISSORS

... or ask an adult for help with regular scissors.



LARGE CONTAINER

Filled with water.



DIRECTIONS

DESIGN A BOAT CHALLENGE

Build a boat design by wrapping the tinfoil around the cardboard shape to create the boat hull, then see if it can float. You can use tape or glue to help secure a flag. Personalize the boat if you'd like.

After your boat is finished, fill a large container or tub slightly with water. Place the boat on the water to see if it floats for at least a minute.

If in a group, have each person build their own boat. Track which designs float best and which ones sank. Which boats were able to float? Why?

WAS YOUR SHIP ABLE TO FLOAT?

Real ships made with steel or wood are denser than water, but they can float because the ship's hull contains a mass of air and the resulting shape has an average density less than that of the water.

