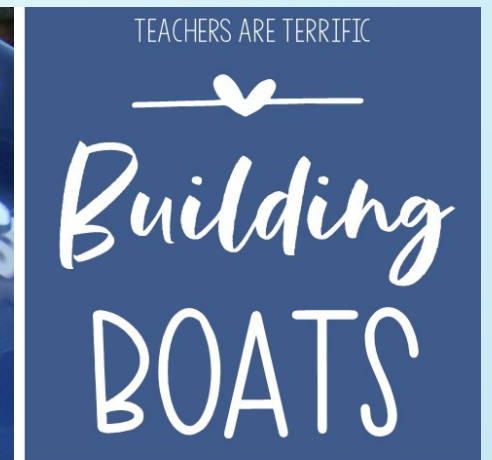


STEM BOAT CHALLENGE



THE CHALLENGE

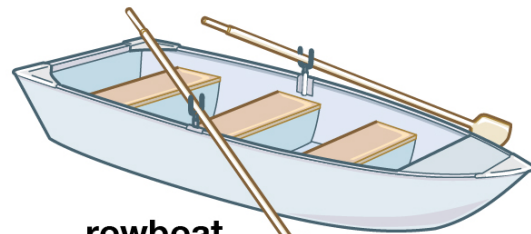


Build a boat out of a piece of aluminum foil that is **30cm x 30cm** in size



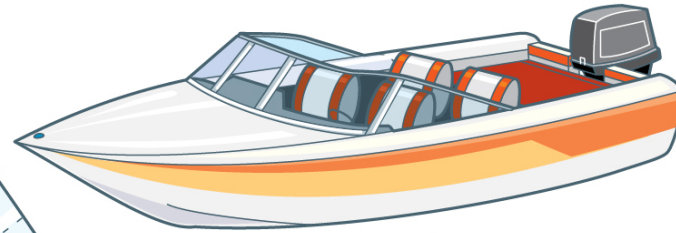
Your boat **MUST FLOAT** and be able to hold a minimum of **3 QUARTERS**

TYPES OF BOATS

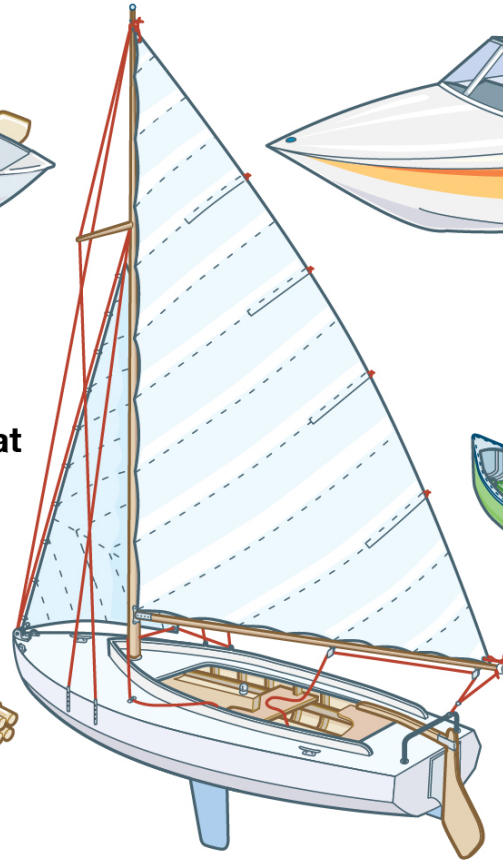


rowboat

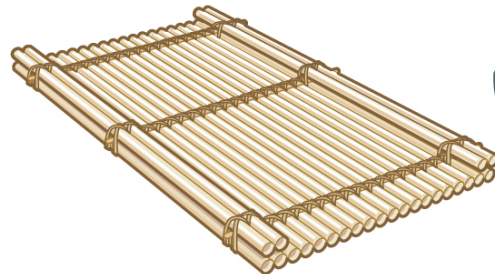
oar



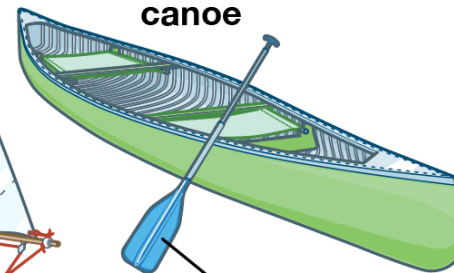
motorboat



sailboat



raft



canoe

paddle

MATERIALS



30cm X 30cm piece of
aluminum foil (2)



Large, clear tub of water



Roll of quarters

PROCEDURES

1. Design and sketch a prototype of your boat on the recording sheet.
2. Build a model of your sketch using the 30cm x 30cm piece of aluminum foil.
3. Test your model boat in the tub of water.
4. Add 1 quarter at a time until the boat begins to sink.
5. Record how long your boat stayed afloat on your recording sheet, in seconds.
6. Repeat steps 1-5 by redesigning, sketching, building, and testing a second boat.
7. Repeat step 5.
8. Reflect on your design and the building process by filling out the Boat Challenge Reflection Sheets.