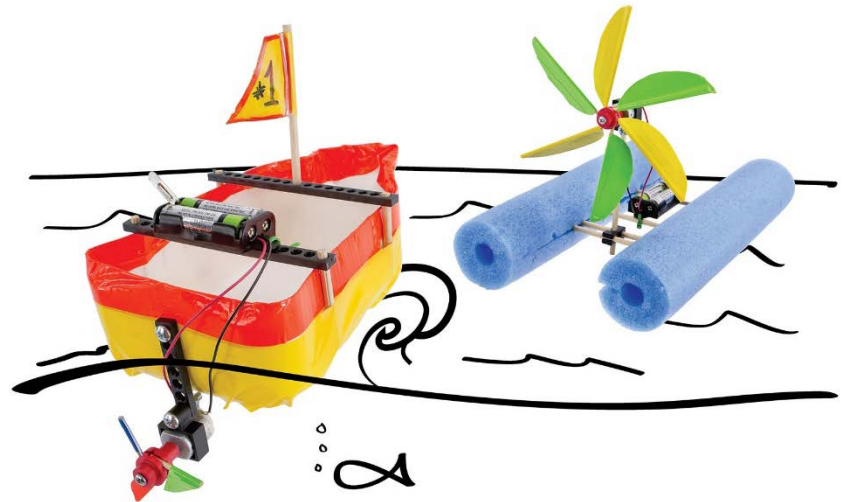
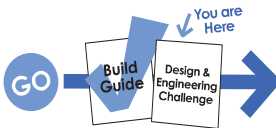


Build-a-Boat Engineering Challenge



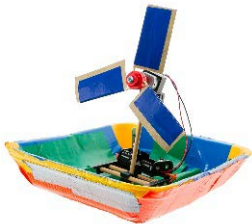
The Challenge

Redesign your boat build to race across a body of water the **fastest**.



Before you start... Make sure you have built an example **Boat** for use on this challenge.
Documents & supplies at teachergeek.com/learn

Challenge Supplies



Boat Build



Recycling Materials



Floating Materials



Stopwatch

Constraints

(rules & limits for your design)

- The boat must be powered by a **motor** or the **wind** during the race.
 - The boat must not be pushed or pulled by your hand.
- The boat must remain right-side-up when crossing the finish line.
- Additional materials may be brought in for boat designs, if they are:
 - TeacherGeek components
 - Found & Recycling Bin materials
 - Teacher Approved, Non-Hazardous
- You will have _____ to complete this design challenge.

Fill in how much time you have



The time from building and re-designing your boat to the start of the competition.



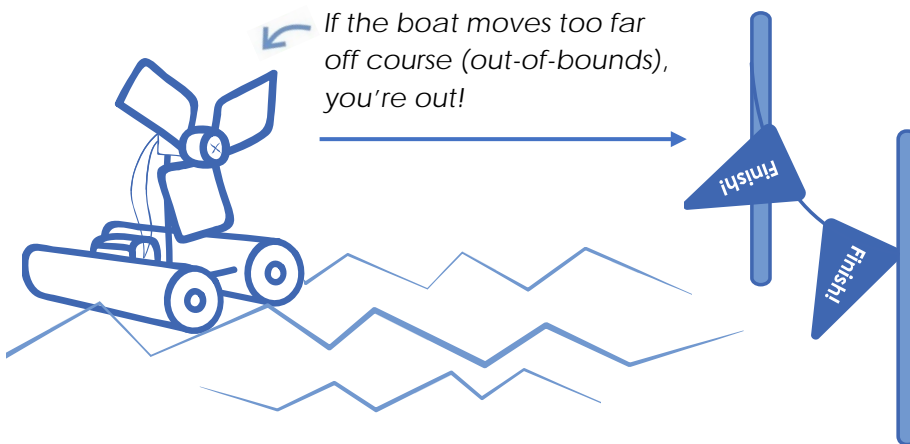
Build-a-Boat Engineering Challenge



Challenge Scenarios

Speed Boat Regatta

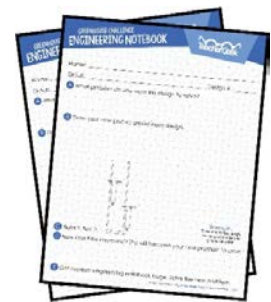
Enter your boats in a regatta (boat race), competing for speed, with a stopwatch. The first boat to cross the finish line, wins. *What materials can you add or create to make your boat faster, or sail in a straight line?*



Use sticks, poles, string or fishing wire to mark the finish line of the regatta course.

Carry That Weight

Design a boat that can carry the most weight from one point to another. Use objects of **consistent** (regular) weight such as **golf balls** or bean bags. Race three times – adding more weight each trial. *If the boat takes on water or sinks, you're out!*



Engineering Notebook

Use engineering notebook pages to go through the Design Process. Sketch ideas, take notes and use them to compete in challenges! Find at teachergeek.com/learn

