



Build A Barge Design Brief



Background: Virginia Outdoor Center needs to add barges to their fleet of riverboats. They are asking barge-building companies, like yours, to compete for the contract to build them. Your company must show that you have reliable, efficient, and economic barges. Your team must design a barge and show data that proves its maximum carrying capacity. You are competing against other companies for a barge that carries the most weight!

Design Challenge: Design and build a barge that will carry a maximum load in the water.

Criteria:

Your barge must:

- Stay afloat while carrying loads!
- Be 8 cm wide, 40 cm long, 4 cm deep
- Budget is \$10.00 (optional depending on grade)

Materials:

Building material cost sheet:

Tape (every 15 cm)	\$0.05
One plastic cup	\$0.05
Tin foil (30 cm x 15 cm)	\$0.40
Staple (each)	\$0.05
Construction paper	\$0.30
Straw	\$0.20
Foam board (60 cm x 15 cm)	\$5.00
Cardboard (60 cm x 15 cm)	\$3.50
Poster board (60 cm x 15 cm)	\$2.50
Corrugated plastic (60 cm x 15 cm)	\$5.50