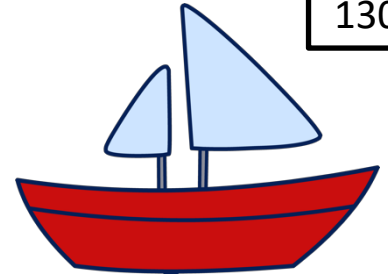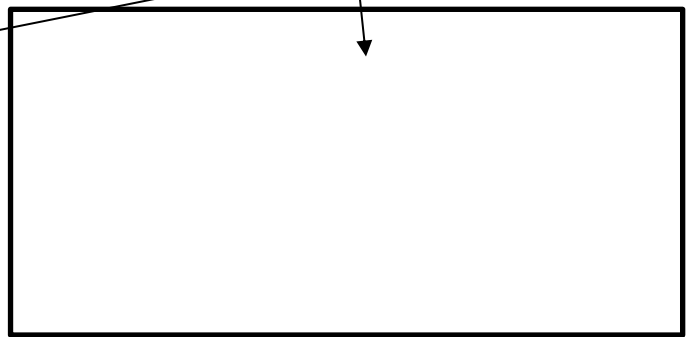Name _____

DESIGN A BOAT

Engineering Challenge

Purpose: To design, engineer, and build a boat that will float the most marbles without sinking.

Supplies: 1 sheet of foil

Imagine: Brainstorm several ideas you have for how to build a boat. Draw pictures of 2 different boat designs.

Design: Draw a simple design of your final boat.

Build: Build your boat.

Test: **Test** your boat by placing it in the water. Add marbles to your boat counting one at a time until your boat sinks.

Data: How many marbles did your boat hold? _____

Analysis: After observing how your boat floated, list 2 things that were successful and 2 things that were not.

    Successful

     1 –   2 –

    Not successful

     1 –   2 –

Redesign & Retest- If your container did not hold the most marbles, you will need to redesign, rebuild and retest. You may get a new piece of foil, but you may not use any part of your previous foil.

After observing your new boat, **explain** how the changes affected the amount of marbles you were able to float.

_____

_____