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QEA I
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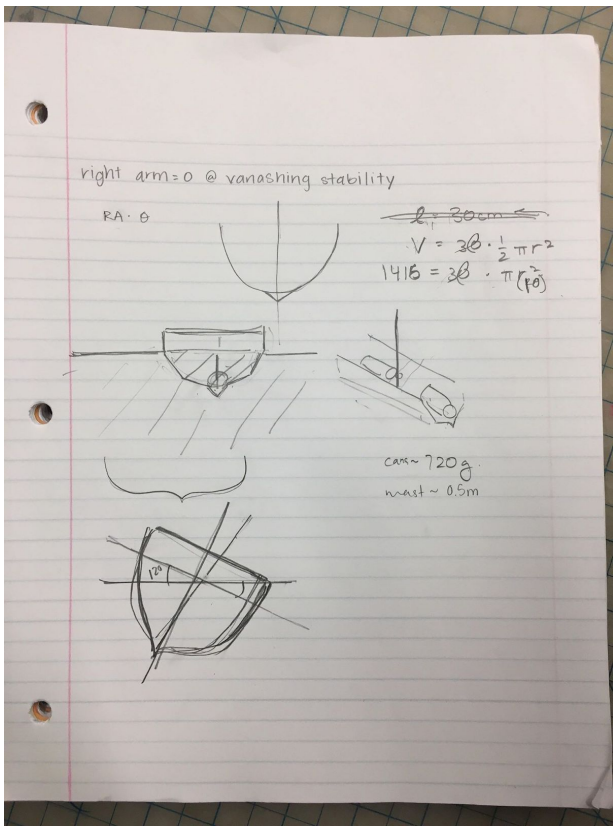
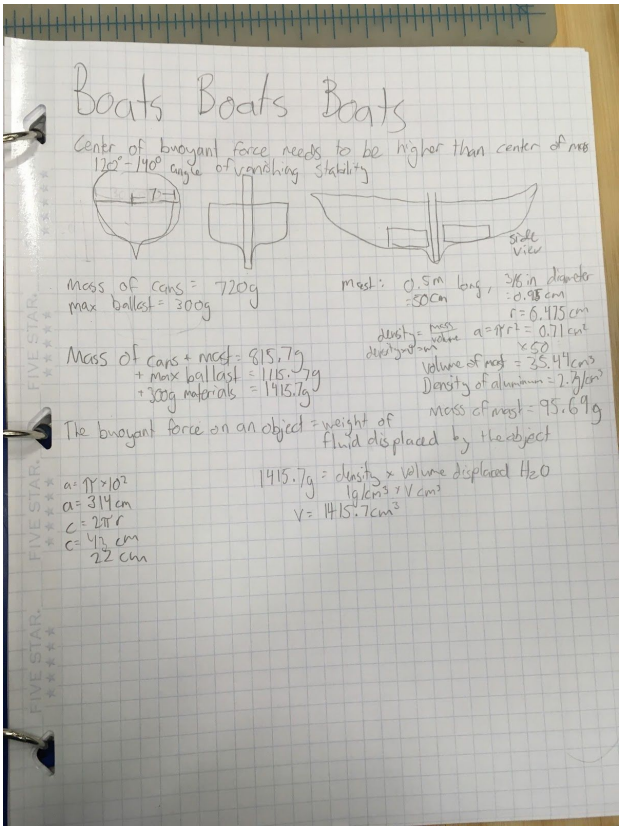
Brief Description:

We began by researching the topic in general and familiarizing ourselves with terms like angle of vanishing stability, right arm, the difference between center of gravity and center of buoyancy, etc. Then, we began sketching and determining what we wanted to focus on given the limited amount of time. We decided to focus of making it float level. We determined that the angle of vanishing stability was too hard to calculate in the amount of time given. We then determined the dimensions of our boat depending on the mass of the boat and the volume we want dispersed. In general, we new we could make our boat float but we were very nervous about the angle of vanishing stability.

Notes:

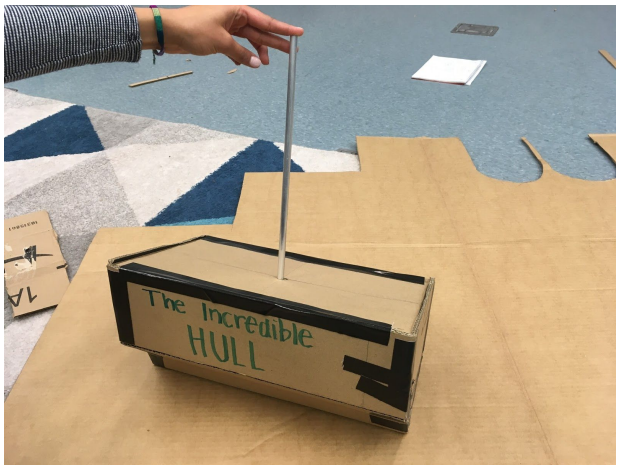




Important aspects:

- A dip to bring center of mass lower, hold the cans, and center the boat
- Wide enough to float evenly on water
- Mass attached to bottom to make a high angle of vanishing stability

Photographs:



Final Results:

Float? Yes
Level? Yes
Angle of Stability? 180