

DUCT TAPE CHALLENGE

Boats - FOR EVENT LEADER

MATERIALS: Each team gets the following:

- 2 rolls of duct tape
- 3 popsicle sticks

Teams may also bring something to write with, a stopwatch, 1 scissors, and 1 ruler.

There is one extra set of materials for if a team discovers they are missing something, or something is damaged. It is THEIR responsibility to check materials before the competition begins. Their instruction sheet tells them to do so.

Teams also need a copy of the instruction sheet.

You need a way to:

Time the **25 minute build time**.

Weights to be added to the boats (10g, 25g, 100g, 200g) totaling 2KG should be enough.

Tub to fill with water, roughly 24L x24W x 12H and preferably see through.

Scale to weigh the empty boats.

Towels to dry the weights between tests

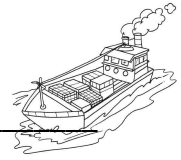
Please note- one person from each team will add the weights to their own. Boats must fit in the tub without touching the sides or bottom. Boats that begin to rest on the bottom of the tub or are taking on water are considered to sunk. The previous amount of weight before that point is their score.

Note: measure the weight total prior to the last weight added.

TIEBREAKER: The team with the lightest boat wins.



Duct Tape Challenge 2017 – Boat Div C



School _____ Team# _____
Names: _____ , _____

You are responsible for making sure you have all the materials and that none are damaged. DO THIS NOW!

2 rolls of duct tape

3 popsicle sticks

TASK: Build the boat that will hold the most weight before sinking.

The boat must be free standing (cannot rest on the bottom of the tub or use the sides of the tub, table, etc.). The last successful amount of **weight you add** will be used. Success is not taking on water, not resting on the bottom, not tipping over and not sinking.

You will have 25 minutes to build.

SCORING: The weight in grams will be measured.

TIEBREAKER: The team with the lightest boat wins the tie.

SCORING: The boat that can still float with the most weight loaded wins.

FOR EVENT LEADER

Total **successful** amount of weight held in to the boat (in grams) _____

Before Testing: Weight of the empty boat (in grams to the nearest tenth): _____ (tiebreaker)

Does the empty boat float: Yes or No

Does the boat fit into the tub: Yes or No

If either question is NO, then Tier 2. Otherwise, Tier 1.

Tier: 1 2

Final Rank: _____

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