

Foil Barge Project 2017

Goal

To construct an aluminum foil barge that will hold the greatest weight without sinking.

Teams

Each team will consist of 1 to 2 individuals

Description

1) All barges will be constructed from a 15 X 15 cm piece of standard aluminum foil provided by Mr. Duhrkopf. No other material can be used. There are no design or shape limitations.

2) We will spend 1 class day for design and practise. You will then be given 10 minutes at the start of Day 2 to complete your design and submit it for approval. The barge will remain in dry dock until time for loading.

3) One team member will be designated the barge captain and is in charge of all the handling of the barge. Barges will be tested in a container of water by allowing the barge captain to place pennies into the barge 1 at a time until the captain decides it has reached a safe limit of loading.

4) Once the barge captain has stopped adding weight the barge must remain afloat for at least 1 minute for it to be successful. If the barge sinks you will be disqualified.

5) The barge captain will have a maximum of 10 minutes to add weights to the barge. If that time elapses before he or she has chosen to stop, no further weight may be added and the 1 minute free-float time test will begin automatically.

6) You will only be allowed 3 barges for testing.

Grading

This project will be worth 10 test points. You will be scored on a 20 point scale but the assignment will be weighted at 50%. Each team will receive 3 points for building a workable barge. You then will receive 1 point for every 5 pennies your barge will support. (85 pennies = 20 pts)

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Foil Barge Project 2014

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Grading

This project will be worth 20 test points. The team who supports the most pennies for 1 minute will receive 20 points. The other teams will receive the same percentage out of 20 that they are of the winning total. If the winning total is 80 pennies and you had 60 pennies you would receive $15/20$ which is 75%.

Foil Barge Project 2012

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Foil Barge Project 2009

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Foil Barge Project 2008

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