

# Foil Boat Regatta



**QUESTION:** What is the greatest number of pennies you can float in a foil boat?

**MATERIALS:**  
aluminum foil (10 cm x 10 cm)  
pennies

- PROCEDURE:**
1. Use the materials provided to design a barge that will float the greatest number of pennies without sinking. In the Data Table, record the number of pennies your boat held.
  2. Repeat this two more times, trying to improve your design each time. Record the data for each barge in the Data Table.

**DATA:**

FOIL BOAT	NUMBER OF PENNIES
1	
2	
3	

- QUESTIONS:**
1. In this activity, what force works against the force of gravity?
  2. Which of your three boat designs held the most pennies?
  3. Which of your three boat designs held the fewest pennies?
  4. What are some characteristics or features that should be included in making a foil boat that will hold a large number of pennies?
  5. Besides the design of your foil boat, what other factors affected how many pennies it could hold without sinking?