Sink or Float

You will need to gather:
Aluminum foil
Pennies
Water
A big container or tub for your boat to float in

Procedure:
You will need to cut one square foot of aluminum foil. Crumple it up into a solid ball and drop it into the water. Did the foil float or sink?
Get another piece of one square foot of aluminum foil. Construct a boat from the foil. Place it on the water. Does it float now?
Estimate how many pennies your boat will be able to hold. Place as many pennies as you can in the boat before it sinks.

Data & Observations:
Record qualitative and quantitative observations during your experiment.
Describe the construction of your boat.
Draw a picture of a side view of your boat in the water.

Analysis & Conclusion:
1. What was your hypothesis?
2. What was your independent or manipulated variable?
3. What was your dependent or responding variable?
4. Was this experiment a controlled experiment?
5. How many pennies did your boat hold?
6. What feature of the construction of the boat contributed to the number of pennies the boat held?
7. What property of the foil that caused it to sink or to float?
8. Was your hypothesis supported or refuted?
9. If you had to perform this experiment again, what might you do differently?
10. How might this lab provide useful information for the study of oceanography?