Name_____

Date_____

HOME/SCHOOL CONNECTION

Controlled Experiments

Design a controlled experiment using aluminum foil to make a boat that floats in water. Use pennies as passengers.
<u>Question:</u> How does the _____ affect the number of passengers a boat can hold before it sinks?

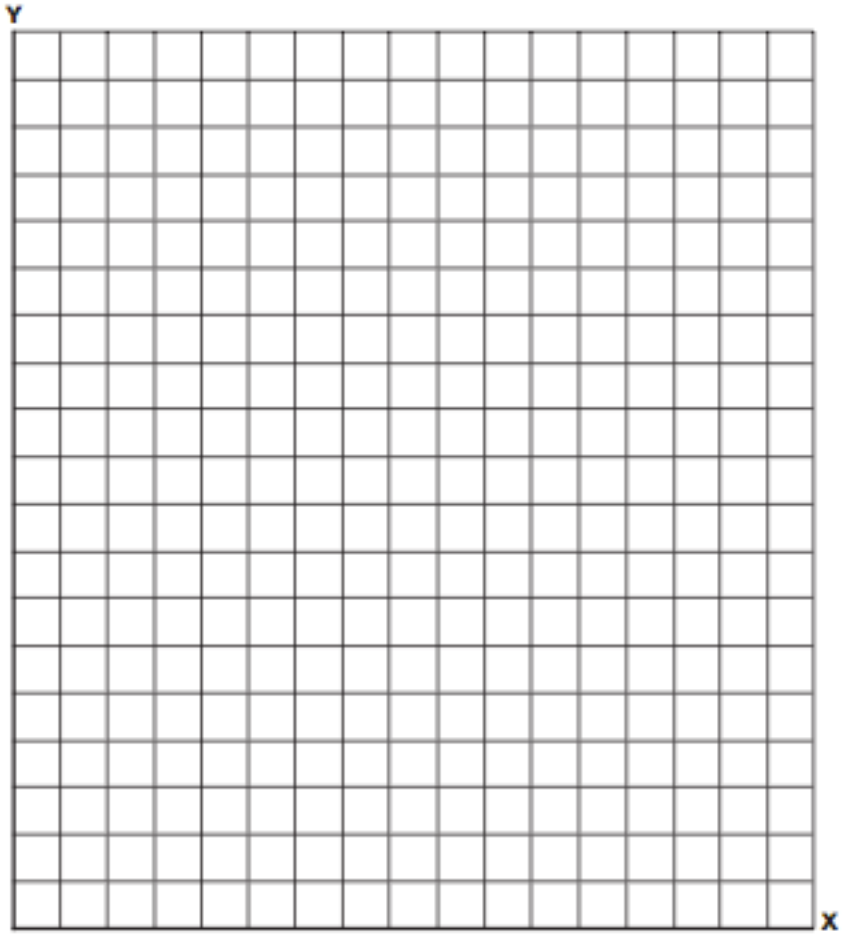
Describe your **standard system**. Can you draw a sketch of your standard boat? *(Hint: Think of all of the things that are a part of the system, including the pennies, the water, how much foil you will use to make your boat, how you will shape the boat, and how you will place the passengers (pennies) into the boat.)*

What variable will you change and how will you change it in steps?

Do your experiment and collect data. Use the table below.

	Trial 1	Trial 2	Trial 3	Average (mean)
Standard				

Can you make a graph of your data? Show how you tested your variable in steps on the x-axis. Your results go on the y-axis. Remember to use only your average calculations and to label the parts of your graph!



Write a conclusion that answers the original question. Can you state the relationship between the tested variable and the results?

Do you have any other questions or ideas that you would like to explore?