Boy, Oh Buoyancy

Objectives:

Students will test the buoyancy of wood in fresh water and in salt water.
Students will collect and analyze data.

Materials:

Wooden blocks (large enough to hold several washers), large washers, water, bowls, salt (3.5 grams per 100 ml water)

Procedure:

1. Fill a large bowl with water. Float your piece of wood in the water.
2. Predict the number of washers it will take to sink the wood. Make a chart of this information.
3. Test your prediction.
4. Follow steps 1, 2 and 3 again, but use salt water.

Results:

1. On the back of this page, make a chart of your predictions for fresh and salt water; include the results.
2. Did the results match your expectations? Why do you think the wood behaved as it did?

3. You are swimming in salt water. Will you need as much material to keep you afloat as you might need in fresh water? How do you know?