



TESTING THE BUOYANCY OF DIFFERENT OBJECTS IN SALT VERSUS FRESH WATER



Name: _____ Date: _____ Scientist: _____

QUESTION

How does the type of water (fresh vs. salt) affect the buoyancy of different objects?

HYPOTHESIS

Predict what will happen.

MATERIALS

- 2 clear containers or large cups
- Fresh water
- Salt
- Stirring spoon
- Various small objects (see ideas below)
- Ideas for objects: plastic bottle cap, coin, marble, eraser, paper clip, cork, small rock, wooden block, grape

PROCEDURE

1. Label one container "Fresh Water." Fill it with fresh water.
2. Label the other container "Salt Water." Fill it with water and add salt.
3. Stir the salt water until the salt is mostly dissolved. (Add more salt if some remains undissolved.)
4. Test each object in the fresh water first. Record whether it floats, sinks, or stays suspended.
5. Test the same object in the salt water. Record whether it floats, sinks, or stays suspended.
6. Repeat for all objects.

DATA TABLE

Object	Fresh Water (Float / Sink / Suspended)	Salt Water (Float / Sink / Suspended)	What Changed? (Yes / No)	Notes
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

OBSERVATIONS

What patterns did you notice?

CONCLUSION

What did you learn from this experiment?

SCIENCE TIP

Salt water is more dense than fresh water. More dense liquids provide more buoyant force, which can help objects float that sink in fresh water.



★ Clean up: Dispose of the salt water outside (not in plants). Rinse and dry all materials.