

Test the difference

Practical investigation instructions

Purpose

To investigate the differences in freshwater and saltwater and learn that while they may visually look the same, their characteristics and properties are different.

Hypothesis

The eggs will sink or float in different types of water.

Materials

- 3 x raw eggs
- 3 x containers or cups
- 600mL of water
- 1-2 cups of salt
- 1 x tablespoon
- 1 x stirrer (e.g. wooden sticks)

Safety

Risk	Rating	Control
Cut	L	Elimination – don't use glassware
Poison	L	Administration – don't consume the water or eggs

Procedure

1. Fill all the containers or cups with water until it is about halfway full.
2. Place an egg in the 1st cup of water and observe whether it sinks or floats.
3. Add salt in both the 2nd and 3rd cups. Begin with 2 tablespoons of salt and stir until it dissolves. Continue to add salt until the eggs can float!
4. Pour gently more water in the 3rd cup until it is nearly full and see what happens (try not to disturb or mix the salty water with the freshwater).

Results

Observe and compare the position of the eggs in different containers.
Record the results for each type of water.



Figure 1: Egg in freshwater (left), saltwater (middle) and both (right).

Practical review

- Compare how each product fared in your test.
- Describe your observations.
- Make a conclusion.
- Check out whether your hypothesis was correct or not.
- Suggest how you should properly dispose or store each item.