

The Floating Egg Experiment

Overview

This experiment is designed to investigate whether fresh water or salt water causes things to float more. We will be using common household items to help us answer this question.

For more information and an example of this experiment check out:

<https://www.youtube.com/watch?v=zszw6uCiQpc>

<http://www.sciencefun.org/kidszone/experiments/floating-egg/>

Key Words

What is **matter**?

- anything that takes up space.

What is **density**?

- the amount of matter contained in a given space.

Materials

- Table salt
- Two large clear containers (Example: mason jar)
- Tape for labeling containers (“fresh water” and “salt water”)
- Tablespoons for measuring salt and stirring
- Tap water
- Two raw eggs

Directions

- Review the “Scientific Method” and “Scientific Journal” worksheet online.
- Prepare your own scientific journal for this experiment (example below).
- Develop a hypothesis for which container (salt or fresh water) will cause the egg to float.
- Fill the two containers with equal amounts of tap water.
- Add a raw egg to each container.
- Record if the egg floats in a data table.
- Add 1 tablespoons of table salt at a time to the “salt water” container and stir until salt is dissolved.
- Record if the egg floats with each added tablespoon of salt in a data table.
- Draw conclusions about your results and report what you have found.

Pre-Activity Questions

- Which container (salt or fresh water) do you think will cause the egg to float?
- How many tablespoons of salt do you think is needed to make the egg float?
- What do you think will happen to the egg when you add more fresh water to the salt water container?

Example Scientific Journal

Scientist's Name: _____

Date: _____ Class: _____ Start Time: _____ End Time: _____

Question / Hypothesis:

Write down what you are investigating.

Materials / Methods:

Write down all the materials that you will need for your scientific investigation.

Data Collection:

Write down all the things that you observe during your scientific investigation.

Use charts or tables when available.

Tablespoons Added	Fresh Water Container	Salt Water Container
1 Tablespoon	Did the egg float? Yes or No	Did the egg float? Yes or No
2 Tablespoon	Did the egg float? Yes or No	Did the egg float? Yes or No
...
...
...
...

Results / Conclusion:

Write down a summary of your scientific investigation.

What did you learn? Did you answer your question or hypothesis?

Post-Activity Discussion:

Use online resources to investigate further on density and the properties of fresh water and salt water.

- What have you learned about density? Is fresh water or salt water more dense?
- How does water's density change when salt is added to it?
- Try adding fresh water into the container with the egg and salt water. What happens to the egg?
- Now imagine yourself in the pool and in the ocean. Would you float more in the pool or the ocean and why?