

Make An Egg Float!

You've probably heard of a root beer float, but an egg float? Try one for yourself with this experiment on density.

What You Need

- · two tall drinking glasses
- two raw eggs
- water
- salt
- spoon



What You Do

- 1. Fill one glass almost to the top with water.
- 2. Carefully drop an egg into the water-filled glass, and watch what happens.





Step 2

- 3. Fill the second glass with water until it is half full.
- 4. Add four tablespoons of salt to the second glass and stir. Then fill the glass with water almost to the top.



This is a safe experiment for small groups of students to complete on their own. Be sure students who handle the eggs wash their hands with soap and water after they finish the activity.

Step 4

What You Do (Cont'd.)

5. Carefully drop the second egg into the salt water solution, and watch what happens.





Step 5

Why It Happened

In Step 2, the egg dropped to the bottom of the glass. But, in Step 5, the egg floated! Why the difference? It's all about density. Density has to do with the amount of matter contained in a specific space or volume. Because the egg is more dense than the water, the egg pushed away water particles so it could make space for itself, thus sinking.

When the salt was added to the water in the second glass, the salt dissolved into particles that bonded tightly to the water molecules, which packed more matter into the space. This makes salt water denser than regular water. The denser the liquid, the easier it is for an object to float in it.

Ask students to use this experiment's results to explain why they can float more easily in the ocean than they can in a freshwater lake.