

## Lesson Plan: Make an Egg Float!

Subject: Chemistry/Density

Age Group: 4-5th Grade

Supplies Needed:

- Water
- 2 Eggs
- Liquid soap
- Cooking oil
- Salt
- Sugar
- Glass
- Tablespoon
- Balance scale

Introduction:

- Ask the students what they think density is.
- Also ask them what they think will happen to an egg if we place it in a glass of water.
- Then ask them what they think will happen if a small rock is dropped into a glass of water.

Instructions:

1. Fill a glass about halfway full with water.
2. Place an egg into the water.
3. The egg will sink because it is denser than the water.
4. Start adding salt to the water one tablespoon at a time.
5. Stir the water to help dissolve the salt.
6. Ask them what happened and why they think it happened.
7. Also ask how much salt they had to add to get their egg to float.

Follow-up:

- Adding salt to the water squishes more molecules into the water. This makes the water more dense.
- When there was no salt in the water, the egg was denser than the water, therefore it sank.
- Adding salt to the water makes the water denser than the egg, which makes the egg float.
- If you weigh a cup of saltwater and a cup of fresh water, the saltwater will weigh more than the fresh water even though it is taking up the same amount of space (a cup). This is because the saltwater is more dense than the fresh water.

- Source: <http://pbskids.org/zoom/activities/sci/makeaneggfloat.html>