



## Floating Eggs

*Do you ever wonder why you float easier in the ocean versus in a pool? This experiment will show you how water, and the ability for things to be buoyant, changes on the salinity of the water.*

### Overview & Purpose

If you try to float in a pool it may be more difficult than if you tried to float if you were in the ocean. Why is that? What causes objects to "float" or have more buoyancy in the ocean versus other bodies of water? The ability for an object to float depends on the salinity of the water, or in other words the buoyancy of a liquid. This experiment will show you how an egg (which is more dense than water) can actually float when placed in a cup of water with salt!

Buoyancy - The upward force a liquid exerts on an object placed in it.

Salinity - Saltiness or dissolved salt in a body of water.

### Ingredients

- 2 drinking glasses
- 10 tsp of salt
- 2 eggs
- Water

### Get started

1. Pour water into both of the drinking glasses, each half way.
2. In one glass, put 10 teaspoons of salt into the water, while leaving the other free of salt.
3. Insert one egg into the glass without salt first, taking mental notes on what the egg did.
4. Next, insert the other egg into the water with the salt.

### Questions:

- What do you observe?

- Do you think all oceans have the same salinity? Why or why not?
- How would the egg react if there was more salt? What about less salt?
- Why does the water become more buoyant with more salt?

