

LEARNING ABOUT DENSITY IN SALTWATER VS. FRESH WATER



Summer is a great time to explore parks where water is the main attraction. Parks such as Crater Lake National Park (OR) and Lake Mead National Recreation Area (NV, AZ) have freshwater ecosystems. Other parks including Fire Island National Seashore (NY) and Gulf Islands National Seashore (FL) have saltwater ecosystems. Have you ever been in the ocean and noticed that it's easier to float on your back than when you swim in a lake? That's because the saltwater in the ocean is denser than the freshwater in the lake.

Density is the relationship between the weight/size of a substance and the amount of space it takes up. When salt is present in water, the water's weight increases, making it more dense. This allows more objects to float on the surface versus sink in fresh water.

In this experiment, increase the density of fresh water by adding salt to see how much is needed to float an egg.

SUPPLIES

- One glass (tall enough to fit an egg)
- Raw egg
- Water
- Salt
- Pen/pencil
- Paper

INSTRUCTIONS

1. Fill the glass two thirds of the way with water.
2. Place your egg in the glass of water.
3. Observe what happens and record your results.
4. Consider the following question and record your hypothesis:
 - How much salt do you need to add to the glass of water to make the egg float?
5. Slowly add one teaspoon of salt to the glass at a time and stir lightly.
6. Repeat steps two and three until the egg floats. How many teaspoons of salt did you need?



READY FOR MORE? TRY THIS: Run the same experiment using other small objects to see what will float in saltwater and fresh water.