

## Egg Float

*Have you ever wondered why it's easier to float in the sea than it is a swimming pool? Have you ever noticed markings on the side of a ship (load lines)? Fresh water and sea water have different effects on the buoyancy of objects within them. The difference between water types on the effect they have on buoyancy is the result of salt levels.*

For this week's activity, we thought it would be great if you explored the effect of salt on objects placed in water.

**ADULT SUPERVISION REQUIRED – Before collecting any materials you must get adult permission. Additionally, you must check you are not allergic to any of the resources listed below.**

### **Suggested instructions:**

#### Equipment and resources

- Water.
- Salt.
- Tall glass.
- Spoon.
- Egg.

#### Steps:

1. Fill your glass to halfway.
2. Place your egg in the glass. What do you notice?
3. Gently start stirring salt into the glass.
4. Keep adding salt. What do notice happening to the egg?
5. Add enough salt until the egg is floating on the water surface.
6. Very carefully, add fresh water. If you are careful, the egg should be able to float between the fresh water and the salt water.
7. Add a generous amount of pepper to the container. You will notice the pepper mostly floats and spreads around the container.

Thinking time:

- An egg is a lot denser than fresh tap water. What that means is that it contains a lot more parts (molecules) in it than fresh water, which means it will sink when placed in fresh water. If you add salt to fresh tap water, the tap water will eventually contain more molecules in it than the egg, causing the egg to rise.

Follow up:

- Can you test if there are other things you can add to the water to make the egg float? (Check with an adult).
- Why not write about your experiment using one of our templates in Science.