

## **Floating in salty water**

There are lots of enquiries we can do with floating and sinking that develop working scientifically skills and understanding of one property of materials: density.

Encourage children to talk about what they notice, ask questions and try things out.

### **Challenge: Can you make an egg float in salty water?**

Fresh eggs normally sink in water. Can you dissolve enough salt in water to make an egg float? Record your observations and what you find out with pictures.



Try to think about why it is easier to float in the salty water.

### **Questions to think about:**

- Where does the salt go when you dissolve it in water?
- How does this change the water?
- How does this change the density of the water?

### **The science of floating and sinking**

Floating and sinking is all about density. Density is how tightly packed the material inside an object is and, therefore, how heavy it is for its size. Objects that are denser than water will sink. Objects that are less dense than water will float. Ships can be made from dense materials, such as metal, but because the shape of the ship traps a large amount of air inside the boat (which is less dense) the overall density of the ship means it will float.

Dissolving salt in water makes the water denser. Once the water becomes denser than the egg, the egg will float.

Brought to you by the Herts for Learning primary science team