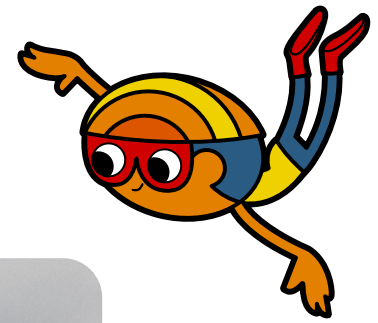


The floating egg



Do eggs float on water?

What's salt got to do with it?



Research question

Normally, eggs sink in the water. They cannot swim, so to speak. With this experiment, we want to investigate whether eggs can be made to float after all. We test:

What happens when you dissolve salt in a glass of water with an egg?

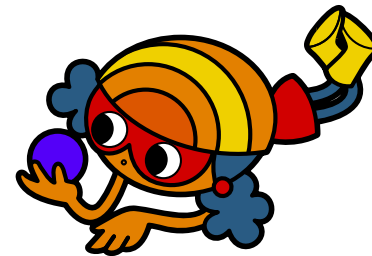
You will need

- 2 Eggs
- 2 Glasses
- Salt
- Teaspoon
- Water



How to do it

Step by step



Dip eggs in water

1. Take two eggs and two glasses and place one egg in each glass.
2. Carefully fill the glasses with water until the eggs are completely covered with water.



Add salt

1. Now add about four to five heaped teaspoons of table salt to one of the two glasses



Stir

1. Stir carefully. Wait until the salt has almost dissolved and observe what happens.



Observe

1. When the salt is almost completely dissolved, the egg begins to float to the surface.



Do eggs float on water?

Information for parents and teachers

Context and the principle behind

The experiment is based on the different densities of pure water and aqueous salt solutions. Since the concept of density is still very abstract and difficult to understand for children of elementary school age, we refrain from a theoretical derivation and limit the experiment to observing what happens when salt is added. The children can see that the salt slowly dissolves in the water. At the same time, they observe that at a certain point the egg begins to float. So, the addition of salt has changed the water. A follow-up experiment could be to investigate whether dissolving sugar can also cause an egg to float. In addition, further experiments on the floating and sinking behavior of materials could be carried out in this context.

Idea for the introduction

Anyone who has ever bathed in the sea has experienced that the salty sea water "carries" the body better. This is particularly visible when bathing in the Dead Sea: Here you can lie down in the water without moving and without sinking. It therefore makes sense to follow up on these everyday observations and thus initiate the experiment.

