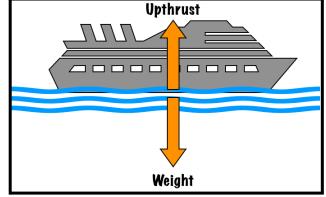
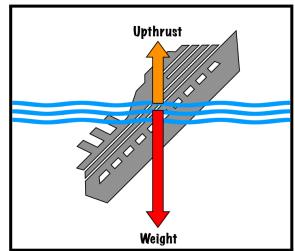
## The Science: Floating and Sinking

When something floats in water, it is said to be **buoyant**. Any object in water has two forces acting on it. The **weight** of the object and the **upthrust** of the water. These two forces act in opposite directions - the weight acts down and the upthrust acts up.



At the beginning of its voyage, the Titanic was floating. This means that the upthrust was the same or more than the weight of the Titanic (as can be seen in the image above).

When the Titanic hit the iceberg and began filling up with water, it's weight started to pull on the boat more than the upthrust. When this happened, the Titanic was no longer buoyant so began to sink.



## The Titanic sinks

The Titanic took about 2 hours and 40 minutes to sink after it hit the iceberg. It hit the iceberg before midnight on the 14th of April but it sank in the early morning of the 15th of April.

The Titanic split in two pieces during these 2 hours and 40 minutes, as can be seen in the image. The Titanic only had 20 lifeboats onboard, which was nowhere near enough for the over 2200 people onboard. Sadly, this meant that more than 1500 people died.

