



Key Knowledge & Vocabulary

Different **materials** have different **properties** e.g. bendy, transparent (see-through).

**Objects** are made from different **materials** depending on the **properties** of those materials. **Suitable** materials are chosen based on their properties.


Some materials **float** on water. Materials which float are **buoyant**.

The **shape** of some materials can be changed.

Materials have different properties in relation to **heat**. Some materials are **insulators** and others are **conductors**.

Working Scientifically

Fair testing 

Observing over time 

Researching 

Classifying, identifying and comparing 

Exploring 

Seeking patterns 

Which did you use in science lessons and why?

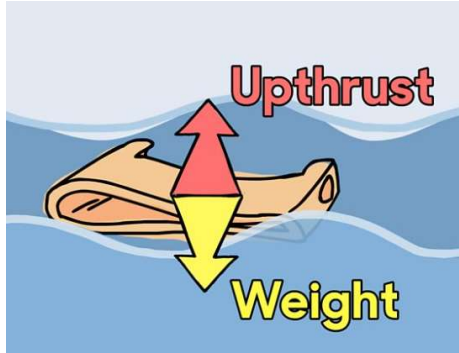
Key Concepts

Materials	Float	Friction	Insulators	Conductors
<b>Objects</b> are made of materials, sometimes only one, sometimes more than one. <b>Materials</b> can have different <b>properties</b> .	When something is in water, there are two forces acting on it. Its <b>weight</b> and the force of the water pushing up, the <b>upthrust</b> . If the weight is equal to or less than the upthrust, it floats. Things that float are <b>buoyant</b> .	Friction is a force between two surfaces that are sliding, or trying to slide, across each other. Friction always works in the direction opposite to the direction in which the object is moving, or trying to move. Friction always slows a moving object down.	<b>Insulators</b> are materials which do not conduct heat very well and so we can use them to control heat and keep things hot or cold.	Conductors are the opposite of insulators. Heat passes quite easily through them. We can use conductors to move heat, for example, radiators are made from metal.

Linking Thinking Across Our Learning Journey

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cause and effect	Cause and effect	Everyday materials	Everyday materials	Magnets	Electricity	Space	Forces

Floating



Friction



Flying



Insulators



Conductors

