

Changing States of Water

<https://www.youtube.com/watch?v=c3X7pIFYky4>

<https://www.youtube.com/watch?v=BitWextjtzM>

Matter and Particles

Everything in the universe is made of the same stuff, and this stuff is called matter.



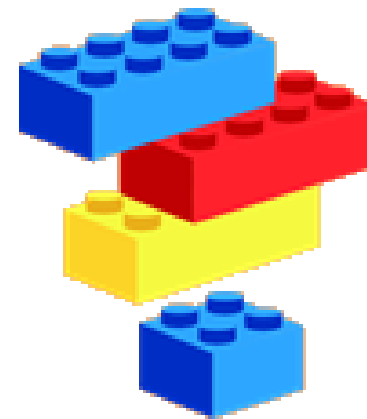
Yep everything! It doesn't matter what it is, it is made of matter! Even you and me.

Matter and Particles

All matter is made up of tiny particles.

These particles are too small for us to see, unless we use a very strong microscope.

These particles are like Lego blocks - there are only a limited number of them, but they can be combined in an infinite number of ways to make different structures and objects.



Solids



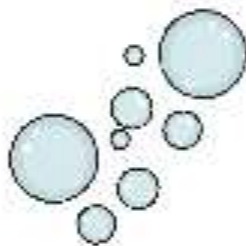
Materials in a solid state **keep their shape** unless a force is applied to them.

Solids can be cut, squashed or twisted. **They will not change shape on their own .**

Solid materials always take up the **same amount of space** . They do not spread out or flow.

Solids **do not have to be hard** . They can be squashy or soft.

Liquids



Materials in a liquid state **take the shape of the container** they are in.

Although liquids **can change shape, they do not change their volume**. This means they still take up the same amount of space.

Liquids are **pulled down to the bottom of a container** by gravity.

Liquids **can flow or be poured**.

Gases



Materials in a gaseous state can **spread out to completely fill** the container or room they are in.

Gases **have weight**.

Gases **can be squashed**.

Gases **do not keep their shape**.