

8th February 2021

I can explain the differences between solids, liquids and
gases.



States of matter:

Solids, liquids and gases?

 <https://www.bbc.co.uk/bitesize/topics/zkgg87h/articles/zsgwwxs>

Your task is to summarise the key points from each slide in your own words using diagrams.

HINT - this will be on your science test in a few weeks time.

Solids

The properties of solids include:

- Solids stay in one place and can be held.
- Solids keep their shape. They do not flow like liquids.
- Solids always take up the same amount of space. They do not spread out like gases.
- Solids can be cut or shaped.
- Even though they can be poured, sugar, salt and flour are all solids. Each particle of salt, for example, keeps the **same shape** and volume.



Examples of solids include ice, wood and sand.

Liquids

The properties of liquids include:

- Liquids **can flow** or be poured easily. They are not easy to hold.
- Liquids change their shape depending on the container they are in.
- Even when liquids change their shape, they always take up the same amount of space. Their volume stays the same.



Examples of liquids include water, honey and milk.

Gases

The properties of gases include:

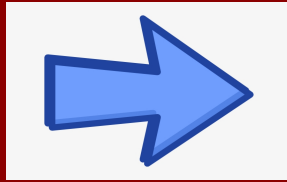
- Gases are often invisible.
- Gases do not have a fixed shape. They spread out and **change their shape** and volume to fill up whatever container they are in.
- Gases can be squashed.



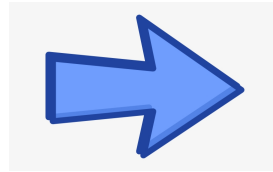
Examples of gases include steam, helium and oxygen.

What are reversible changes?

Can a substance change its state of matter?



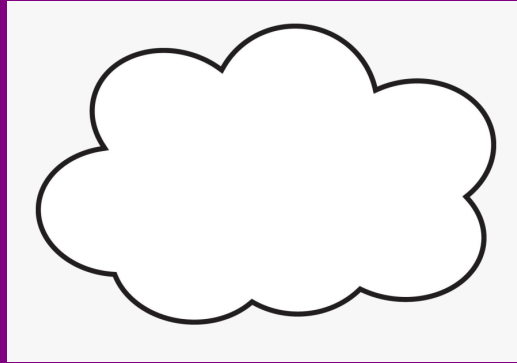
When a solid turns into a liquid it's called MELTING.



When a liquid turns into a solid it's called FREEZING.



When a liquid turns into a gas it's called **EVAPORATION**.



When a gas turns into a liquid it's called **CONDENSATION**.

What are irreversible changes?

Give an example of an irreversible change.

