

# Year 5: Properties and Changes of Materials

## USES OF MATERIALS:



We use materials for certain jobs based on their properties. If a material is hard and strong we will use it to build with. Glass is used for windows as it is transparent so we can see through it. You wouldn't want to use the wrong material—like making a teapot from chocolate! Think of the mess.

## CHANGING STATE:

## KEY VOCABULARY:



**Material:** Different substances around us, like wood, metal, and plastic.



**Properties:** Special things that make materials different, like how they feel,



**Strength:** How well materials can handle force without breaking or bending.



**Reversible Changes:** Changes that can be undone or reversed, like freezing water into ice and then melting the ice back into water. It's like pressing a re-wind button!



**Texture:** How things feel when you touch them, like rough, smooth, bumpy, or slippery.



**Flexibility:** How easily materials can bend or stretch without breaking.

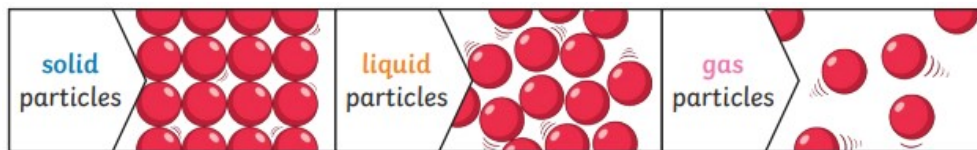


**Solubility:** Whether or not materials can dissolve in liquids, like sugar dissolving in water.

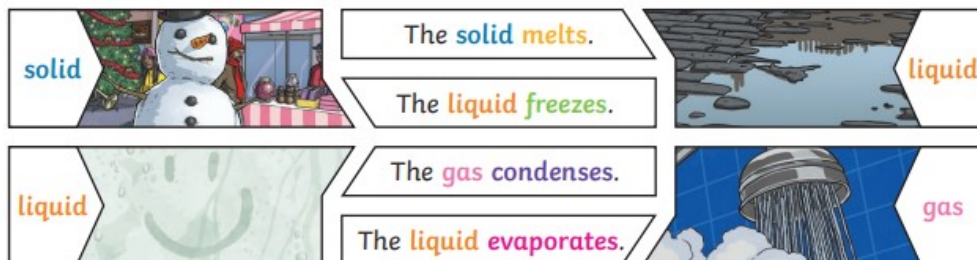


**Irreversible Changes:** Changes that cannot be undone or reversed, like burning a piece of paper or baking a cake. Once it happens, we can't go back to how things were before. It's like crossing a point of no return!

## SEPARATING SOLIDS AND LIQUIDS:



### Changes of State



### Separating Solids and Liquids

#### Filtering



Solid particles will get caught in the filter paper but the liquid will be able to get through.

#### Sieving



Smaller particles are able to fall through the holes in the sieve, separating them from larger particles.

#### Evaporation



The liquid changes into a gas leaving the solid particles behind.