

Year 5 - Properties and changes of materials

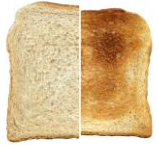
Key Vocabulary

Thermal conductor	A material or device which allows heat to carry through
Electrical conductor	A material or device with allows electricity to carry through
Reversible	Can be reversed back to its original state
Irreversible	Cannot be reversed back to its original state
Transparent	Allows light to pass through
Insoluble	Cannot be dissolved, especially in water
Solution	when one substance dissolves into another
Evaporation	The process of liquid heating and changing into a gas
Dissolve	When something solid mixes with a liquid and becomes part of the liquid

Did you know?

Water can occur in three states: solid (ice), liquid, or gas (vapor).

Reversible and irreversible changes

Reversible	Irreversible
• Freezing water. • Dissolving salt in water. • Melting chocolate.	• Toasting bread. • Burning a candle. • Baking a cake.
	

Materials have different uses depending on their properties.

Glass is used for windows because it is hard and transparent.



Oven gloves are made from a thermal insulator to keep the heat from burning your hands



Different materials are used for particular jobs based on their properties: Electrical conductivity, Flexibility, Hardness, Insulator, Magnetism, Solubility, Thermal conductivity, Transparency.

Separating materials

Filtering

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



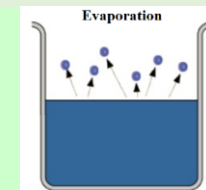
Sieving

Smaller materials can fall through the holes in the sieve, separating them from the larger particles



Evaporation

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



Some changes to materials such as dissolving, mixing and changes of state are reversible.