

Year 5: Why is the learning of chemistry important?

What is chemistry?

Chemistry is the study of matter (materials).
Scientists who study chemistry are called chemists.

Vocabulary

acid	A substance with a PH below 7.
burning	To reduce something to ash.
dissolve	When a solid looks like it has 'disappeared' in the liquid.
electrical conductor	A material that allows electricity to pass through it.
electrical insulator	A material that does not allow electricity to pass through it.
insoluble	A material that does not dissolve in water.
mixture	When substances are mixed together.
rusting	A chemical reaction between iron, water and air.
solubility	The ability to dissolve.
soluble	A material that dissolves in liquid.
solution	When a material dissolves in another.
thermal conductor	A material that allows heat to pass through it.
thermal insulator	A material that does not allow heat to pass through it.

Words to describe the properties of a material

conductivity	The ability of a material to let electricity or heat pass through it.
hard	The ability of a material to resist being dented.
magnetic	A material that creates a magnetic field.
solubility	The ability of a material to dissolve.
transparency	How much light a material allows to pass through it.



You will need to use your Year 4 knowledge of solids, liquids and gases so that you can explore how you might separate mixtures.

Some materials can be mixed together to create a **mixture** or **solution**. Sometimes you can undo what you have mixed together. This is called a **reversible change**. We can reverse these changes in different ways depending on which change took place.

Did you know?

Some **solid** materials will **dissolve** in a **liquid** to form a **solution**.

For example: a cup of tea.

You add the **solid** tea leaves (teabag) to the hot **liquid** (water) and create a new **solution**, 'tea'.



For those who wish to make their tea a little sweeter, they will add some solid sugar. Once the sugar has dissolved, it has created a sweeter solution.

<p>Sieving</p>	<p>Filtering</p>	<p>Evaporating</p>
Smaller materials are able to fall through the holes in the sieve, separating them from larger particles.	The solid particles will get caught in the filter paper but the liquid will be able to get through.	The liquid changes into a gas , leaving the solid particles behind.

CRC Article 17: All children have the right to find out information providing it is safe.

