Science | Changes of Materials | Year 5/6

Key Vocabulary

WORD	DEFINITION
solute	a substance that can be dissolved in a solvent (e.g. sugar)
solvent	a substance that dissolves a solute to produce a solution (e.g. water)
solution	is a mixture of a solute and a solvent (e.g. sugary water)
soluble	a material which can dissolve in a solvent
insoluble	a material which cannot dissolve in a solvent
reversible	a change to a substance that can be undone or reversed
irreversible	a change to a substance which cannot be reversed
evaporate	the process where a liquid changes to a gas
chemical change	a type of change where a new substance is formed
effervescence	fizzing or bubbling
corrosion	the reaction of a metal with oxygen
combustion	an irreversible change where fuel uses oxygen to burn and releases energy.
carbon dioxide	gas which makes up around 0.04% of our atmosphere

Key Knowledge

A thermal conductor is a material that allows heat energy, to be transferred within the material. Materials that are poor conductors of thermal energy are called thermal insulators.

Hardness is the ability of a material to resist deformation. Hardness ranges from super hard materials such as diamond, down to plastics and soft tissues.

The solubility of a substance is the maximum amount of a material (called the solute) that can be dissolved in given quantity of specified solvent at a given temperature.

The saturation point of a material is the stage at which no more of a substance can be absorbed into a vapour or dissolved into a solution. An everyday example of an observable saturation point could be a sponge when it has reached the maximum amount that it can absorb.

Mixtures can be physically separated by using methods that use differences in physical properties to separate the components of the mixture, such as evaporation, distillation, filtration and chromatography.