

Chemistry

Atoms and Elements

Word	Pronunciation	Meaning
atom		The smallest part of an element you can get.
element		All the atoms in an element are the same. A substance that cannot be split up into anything simpler by chemical reactions.
symbol		The letter or letters that represent an element.
periodic table		Table that shows all the elements
metals		Elements that are shiny, conduct heat and electricity well, and often have high melting and boiling points.
non-metals		Elements that are usually not shiny, and do not conduct heat and electricity well.
compounds		Substances that can be split up into simpler substances.
molecule		Two or more atoms joined together.
bond		Force holding atoms together.
mixture		Two or more different substances that are not joined to each other.
alloy		A mixture of different metals.

Chemicals

Word	Pronunciation	Meaning
hydrogen		A gas which is given off when metals react with acids. It burns with a squeaky pop.
carbon dioxide		A gas which will put out a lighted splint and turn limewater milky.
limewater		A chemical that goes cloudy when carbon dioxide is bubbled through it.
oxide		A compound that includes oxygen.
sulfates		Compounds containing sulphur and oxygen. They are the type of salt formed when a reaction with sulfuric acid occurs.
salt		A compound made when acids react with metals or bases. Many salts are chlorides, sulphates or nitrates. Common salt is sodium chloride.
fuel		A chemical that can release energy when it reacts.
rust		Substance formed when iron or steel reacts with oxygen and water.
chemical energy		The kind of energy stored in chemicals.
acid rain		Rain containing sulfuric and nitric acid.

Reactions

Word	Pronunciation	Meaning
chemical reaction		A change where new substances are formed.
physical change	<i>fizz-ick-al</i>	A change where no new substances are formed.
reversible change		A change in which what you end up with can easily be turned back into what you started with.
chemical formula		A combination of symbols and numbers that show how many atoms of different kinds there are in a particular compound.
symbol equation		A way of writing out what happens in a chemical reaction using the symbols that represent the substances involved.
word equation		A way of writing out what happens in a chemical reaction.
reactants		Chemicals that join together to form a new substance.
product		New chemical formed in a chemical reaction.
reactive		A substance that reacts with many other substances, or reacts very easily.
unreactive		A substance that reacts with few other substances, or reacts very slowly or not at all.
reactivity Series		A list of metals which shows them in order of their reactivity, with the most reactive at the top.
displacement		A reaction that occurs when a more reactive metal 'pushes' another metal out of a compound and takes its place.
neutralisation		Mixing an acid and a base together to make a solution with a pH of 7.
oxidation		A reaction that occurs when an element or compound combines with oxygen.
decompose		Break down into simpler parts.
corrosion		When stone or metal reacts with chemicals in air or water and is worn away or changed into a different substance.
combustion		The scientific word for burning.
law of conservation		The idea that the total mass of all the reactants in a chemical reaction is the same as of mass the total mass of all the products.

Properties

Word	Pronunciation	Meaning
property		Something that is used to describe how a material behaves and what it is like. Hardness is a property of some solids.
electrical conductor		Something which allows electricity to flow through it easily.
heat conductor		Something which allows heat to flow through it easily.
high melting point		Something with a high melting point has to be at a very high temperature before it melts. It is a solid at room temperature.
low boiling point		Something with a low boiling point will turn into a gas at a relatively low temperature. It can be a solid, liquid or gas at room temperature.
low melting point		Something with a low melting point turns into a liquid at a relatively low temperature. It can be a solid, liquid or gas at room temperature.
magnetic		A metal (iron, nickel or cobalt) that can be magnetised or attracted to a magnet.