

8Eb – Oxidation

Word	Pronunciation	Meaning
law of conservation of mass		The idea that mass is not lost or gained during a chemical reaction. The mass of all the reactants is equal to the mass of all the products.
metal		Any element that is shiny when polished, conducts heat and electricity well, is malleable and flexible and often has a high melting point.
metal oxide		A metal that has combined with oxygen in a chemical reaction, e.g. magnesium oxide. The general word equation for the reaction is: metal + oxygen → metal oxide
non-metal		Any element that is not shiny and does not conduct heat and electricity well.
oxidation	<i>ox-i-day-shun</i>	Reacting with oxygen. For example, when a fuel combusts or when a metal reacts with oxygen to form a metal oxide.
oxide		A compound of a metal or non-metal with oxygen, such as magnesium oxide or carbon dioxide.
oxidiser		A substance that supplies oxygen for a reaction.
phlogiston	<i>flo-jist-on</i>	A substance that scientists once thought explained why things burn; it has since been proved that it does not exist.

8Ec – Fire safety

Word	Pronunciation	Meaning
exothermic	<i>ex-O-therm-ic</i>	A reaction that gives out energy that can be felt as it heats the surroundings, such as combustion.
fire extinguisher		Something that is used to put out a fire, such as a canister of carbon dioxide, powder, water or foam.
fire triangle		A way of showing in a diagram that heat, fuel and oxygen are needed for fire.
hazard symbol		A warning symbol that shows why something is dangerous.

8Ec WS – Fair testing

Word	Pronunciation	Meaning
control variable	<i>vair-ee-ab-el</i>	A variable other than the independent variable that could affect the dependent variable and so needs to be controlled.
dependent variable	<i>dee-pend-ent</i> <i>vair-ee-ab-el</i>	The variable that is measured in an investigation. The values of the dependent variable depend on those of the independent variable.
fair test		An experiment in which all the control variables are controlled and only changes in the independent variable cause changes in the dependent variable.
independent variable	<i>vair-ee-ab-el</i>	The variable that you chose the values of in an investigation.
variable	<i>vair-ee-ab-el</i>	Anything that can change and be measured.

8Ed – Air pollution

Word	Pronunciation	Meaning
acid rain		Rainwater that is more acidic than usual due to air pollution, usually caused by sulfur dioxide and nitrogen oxides dissolved in it.
asthma		A condition in which the tiny tubes leading to the alveoli become narrow and start to fill with mucus.
catalytic converter	<i>cat-a-lit-ick</i>	A device fitted to the exhaust pipe of a vehicle to change harmful pollutant gases into less harmful gases.
complete combustion		When a substance reacts fully with oxygen, such as: carbon + oxygen → carbon dioxide
incomplete combustion		When a substance reacts only partially with oxygen, such as when carbon burns in air producing carbon dioxide, carbon monoxide and soot (unburnt carbon).
filter (chemistry)		Anything, such as cloth, paper or a layer of sand, through which a fluid is passed to remove suspended pieces of solid.
filter (physics)		Something that only lets certain colours through and absorbs the rest.
nitrogen oxide		Acidic gas formed when nitrogen reacts with oxygen at high temperatures, such as in a car engine. There are different types of nitrogen oxide.
pollutant		A substance that can harm the environment or the organisms that live there.
soot		A form of carbon, which is produced as very fine particles when hydrocarbon fuels undergo incomplete combustion.
sulfur dioxide		An acidic gas released from burning fossil fuels, which contributes to acid rain.

8Ee – Global warming

Word	Pronunciation	Meaning
climate change		Changes that will happen to the weather as a result of global warming.
global warming		Increased warming of the Earth's surface as a result of increased amounts of carbon dioxide and other greenhouse gases in the air.
greenhouse effect		The warming effect on the Earth's surface caused by greenhouse gases absorbing energy emitted from the warm Earth's surface and re-emitting it back to the surface.
greenhouse gas		A gas, such as carbon dioxide, water vapour or methane, in the Earth's atmosphere, which absorbs energy emitted from the Earth's surface and then emits it back to the surface.

8Ee Lit – Information and explanation text

Word	Pronunciation	Meaning
explanation		Text that describes how or why something happens.
information		Text that tells you who, what, where or when.