

### 71a energy and changes/Energy from food

Word	Pronunciation	Meaning
balanced diet		Eating a variety of foods to provide all the things the body needs.
diet		The food that you eat.
energy		Something that is needed to make things happen or change.
joule (J)	<i>jool</i>	The unit for measuring energy.
kilojoule (kJ)	<i>kill-O-jool</i>	There are 1000 joules in 1 kilojoule.
nutrient	<i>new-tree-ent</i>	Substance needed in the diet.

### 71a WS Ratios and percentages

Word	Pronunciation	Meaning
ratio		A way of comparing two different quantities. Two numbers separated with a colon (:).

### 71b Energy transfers and stores

Word	Pronunciation	Meaning
atomic energy		A name used to describe energy when it is stored inside materials. Another name for nuclear energy.
chemical energy		A name used to describe energy when it is stored in chemicals. Food, fuel and batteries all store chemical energy.
elastic potential energy		A name used to describe energy when it is stored in stretched or squashed things that can change back to their original shapes. Another name for strain energy.
gravitational potential energy	<i>grav-it-ay-shon-al po-ten-shall</i>	A name used to describe energy when it is stored in objects in high places that can fall down.
kinetic energy		A name used to describe energy when it is stored in moving things.
law of conservation of energy		The idea that energy can never be created or destroyed, only transferred from one store to another.
nuclear energy		A name used to describe energy when it is stored inside materials.
strain energy		A name used to describe energy when it is stored in stretched or squashed things that can change back to their original shapes. Another name for elastic potential energy.
thermal energy		A name used to describe energy when it is stored in hot objects. The hotter something is the more thermal energy it has.
transfer		When energy is moved from one store into another or from one place to another we say it is transferred.

## 71c Fuels

Word	Pronunciation	Meaning
biofuel		A fuel made from plants or animal droppings.
coal		A fossil fuel made from the remains of plants.
electricity		A way of transferring energy through wires.
fossil		The remains of a dead animal or plant that became trapped in layers of sediment and turned into rock.
fossil fuel		Coal, oil and natural gas – all fuels that were formed from the remains of dead plants and animals.
fuel		A substance that contains a store of chemical or nuclear energy that can easily be transferred.
fuel cell		A machine that combines hydrogen and oxygen gases to produce electricity.
generate		Produce electricity.
hydrogen		A gas that burns.
natural gas		Fossil fuel formed from the remains of microscopic dead plants and animals that lived in the sea.
non-renewable		Any energy resource that will run out because we cannot renew our supplies of it (e.g. oil).
nuclear fuel		Radioactive metals such as uranium. Nuclear fuels are used in nuclear power stations to generate electricity.
oil		Fossil fuel formed from the remains of microscopic dead plants and animals that lived in the sea.
renewable		An energy resource that will never run out (e.g. solar power).
uranium		A radioactive metal that can be used as a nuclear fuel.

## 71c Lit Summarising

Word	Pronunciation	Meaning
abstract		A summary at the start of a scientific paper.
journal		A scientific magazine in which scientists publish their findings by writing articles called scientific papers.
scientific paper		An article written by scientists and published in a science magazine called a journal. It is like an investigation report but usually shows the results and conclusions drawn from many experiments. Scientific papers are often just called papers.
topic sentence		The main sentence in a paragraph, which contains the main point of the paragraph.

### 7Id Other energy resources

Word	Pronunciation	Meaning
geothermal power	<i>jee-O-therm-al</i>	Generating electricity using heat from rocks underground.
hydroelectric power	<i>hy-drO-el-eck-trick</i>	Generating electricity by letting moving water (usually falling from a reservoir) turn turbines and generators.
photosynthesis	<i>foto-sinth-e-sis</i>	Process that plants use to make their own food. It needs light to work.
solar cell		Flat panels that use energy transferred by light to produce electricity.
solar panel		Flat plates that use energy from the Sun to heat water.
solar power		Generating electricity using energy from the Sun.
solar power station		A large power station that uses the Sun to heat water to make steam. The steam is used to make electricity in a similar way to fossil fuel or nuclear power stations.
wind turbine		A kind of windmill that generates electricity using energy transferred by the wind.

### 7Ie Using resources

Word	Pronunciation	Meaning
climate change		The changes in weather that will be caused because the Earth is getting hotter (sometimes called 'global warming'). This is happening because of the activities of humans, and is probably caused by too much carbon dioxide in the air.
efficiency	<i>e-fish-en-see</i>	A way of saying how much energy something wastes.