

Word sheets that include new words from the 'Focus on:' pages are available on the Exploring Science website.

7Aa – Human organs/Organisation/Seeing is believing

Word	Pronunciation	Meaning
brain		Organ that controls what the body does.
eyepiece lens		Part of the microscope you look down.
focusing wheel		Wheel on a microscope that moves parts of the microscope to get the image into focus.
heart		Organ that pumps blood.
image		What you see down a microscope.
intestine	<i>in-test-in</i>	The small intestine is an organ used to digest and absorb food. The large intestine is an organ which removes water from unwanted food.
kidneys		Organs used to clean the blood and make urine.
leaf		Plant organ used to make food using photosynthesis.
liver		Organ used to make and destroy substances in our bodies.
lungs		Organs used to take oxygen out of the air and put waste carbon dioxide into the air.
magnification	<i>mag-nif-ick-ay-shun</i>	How much bigger a microscope makes something appear.
microscope	<i>my-crow-scope</i>	Used to magnify small things.
objective lens		Part of the microscope that is closest to what you are looking at.
organ		A large part of a plant or animal that does a very important job.
photosynthesis	<i>foto-sinth-e-sis</i>	Process that plants use to make their own food. It needs light to work.
root		Plant organ used to take water out of the soil.
root hair tissue		Found in roots. Takes in water from the soil.
skin		Organ used for protection and feeling.
slide		Glass sheet that a specimen is put on.
specimen	<i>spess-im-men</i>	What you look at down a microscope.
stage		Part of the microscope. You put slides on it.
stem		Plant organ used to take water to the leaves and to support the leaves.
stomach	<i>stum-ack</i>	Organ used to store and break up food.
tissue		Organs are made of different tissues.
xylem tissue		Found in roots, stems and leaves. Transports water.

7Ab – On the slide/Building a life

Word	Pronunciation	Meaning
cell	<i>sell</i>	The basic unit which living things are made of.
cell surface membrane	<i>mem-brain</i>	Controls what goes into and out of a cell.
cell wall		Tough wall around plant cells. Helps to support the cell.
chlorophyll	<i>klor-O-fill</i>	Green substance found inside chloroplasts.
chloroplast	<i>klor-O-plast</i>	Green disc containing chlorophyll. Found in plant cells. Where the plant makes food using photosynthesis.
coverslip		Thin piece of glass used to hold a specimen in place on a slide.
cytoplasm	<i>site-O-plaz-m</i>	Jelly inside a cell where the cell's activities happen.
magnification	<i>mag-nif-ick-ay-shun</i>	How much bigger a microscope makes something appear.
microscope	<i>my-crow-scope</i>	Used to magnify small things.
nucleus	<i>new-lee-us</i>	Controls what a cell does.
photosynthesis	<i>foto-sinth-e-sis</i>	Process that plants use to make their own food. It needs light to work. Carbon dioxide and water are used up. Food and oxygen are produced.
slide		Glass sheet that a specimen is put on.
specimen	<i>spess-im-men</i>	What you look at down a microscope.
stain		Dye used to colour parts of a cell to make them easier to see.
vacuole	<i>vack-you-oll</i>	Storage space in plant cells.

7Ac – Shaped for the job

Word	Pronunciation	Meaning
adapted		When something has certain features to help it do a particular job. When the features of a cell help it do its job, the cell is said to be 'adapted' to its job.
cilia	<i>sil-lee-ah</i>	Small hairs on some cells.
ciliated	<i>sil-lee-ayted</i>	Having cilia.
ciliated epithelial cell	<i>sil-lee-ayted ep-pee-theel-ee-al</i>	Cell with cilia found in the lungs.
muscle cell	<i>muss-ell</i>	Cell that can change its length and so help us to move.
nerve cell		Cell that carries messages around the body.
neurone		Another name for a nerve cell.
palisade cell	<i>pal-iss-aid</i>	Cell found in leaves which contains many chloroplasts.
root hair cell		Cell found in roots. It has a large surface area to help the cell absorb water quickly.
tissue	<i>tiss-you</i>	A group of the same cells all doing the same job.
xylem tube	<i>zy-lem</i>	Hollow tube formed from xylem cells and used to carry water up a plant.

7Ad – All systems go/Cell division

Word	Pronunciation	Meaning
breathing system	<i>bree-thing</i>	Takes in oxygen and gets rid of carbon dioxide from our bodies.
cell division		When a cell splits in two. Cells are made using cell division.
circulatory system	<i>serk-you-late-or-ee</i>	Carries oxygen and food around the body.
daughter cell		The two new cells made by cell division are called daughter cells.
digestive system	<i>die-jest-iv</i>	Breaks down our food.
nervous system	<i>nerve-us</i>	Carries messages around the body.
organ system		Collection of organs working together to do a very important job.

7Ae – A seedy story

Word	Pronunciation	Meaning
anther		Part of the stamen. It produces pollen grains.
carpel	<i>car-pull</i>	Female reproductive organ found in flowers. It is made of a stigma, style and ovary.
egg cell		The female sex cell in plants.
embryo	<i>em-bree-O</i>	Tiny plant, found inside a seed, with a very small shoot and a very small root.
fertilisation	<i>fert-ill-eyes-ay-shun</i>	Joining of a male sex cell with a female sex cell.
fertilised egg cell		What is produced when a male sex cell fuses with an egg cell.
filament		Part of the stamen. It supports the anther.
flower		Organ system containing reproductive organs – carpel (female), stamen (male).
fruit		Something used to carry seeds. Can be fleshy or dry.
nucleus	<i>new-clee-us</i>	Controls what a cell does.
ovary	<i>O-very</i>	Part of the carpel. It contains ovules, each of which contains an egg cell.
ovule	<i>ov-you'll</i>	Contains egg cells. Is found in the ovary.
pollen grain		The male sex cell in plants.
pollen tube		Tube that grows from a pollen grain down through the stigma and style and into the ovary.
pollination	<i>poll-in-ay-shun</i>	Transfer of pollen from an anther to a stigma.
reproductive organ		Organ that produces sex cells.
seed		Contains a plant embryo and a store of food.
seed coat		Hard outer covering of a seed.
sex cell		A cell used for sexual reproduction.
sexual reproduction	<i>re-pro-duck-shun</i>	Producing new organisms by combining a male and a female sex cell from two different parents.
stamen	<i>stay-men</i>	Male reproductive organ found in flowers. It is made of an anther and a filament.
stigma		Part of the carpel. It is where pollen lands.
style		Part of the carpel connecting the stigma to the ovary.
variety		A plant or animal that is in some way different from its parents.