

Key Vocabulary		Cell Structures		Specialised Cells + Processes	
Organism	An ORGANISM is a living thing.			Red blood cell	The role of the RED BLOOD CELL is to carry oxygen around the body.
Cell	A CELL is a microscopic structure that is the building block of all organisms.			Nerve cell	The role of a NERVE CELL is to carry electrical messages between different parts of the body.
Tissue	A TISSUE is a group of similar cells working together to perform a particular function.			Sperm cell	The role of a SPERM CELL is to swim to and fertilise an egg cell to deliver half of the genetic information.
Organ	An ORGAN is a group of different types of tissues working together to perform a particular function.			Egg cell	The role of an EGG CELL is to store food for the developing embryo and carry half of the genetic information.
Organ system	An ORGAN SYSTEM is a group of organs that works together to perform a particular function.			Palisade cell	The role of a PALISADE CELL is to provide the plant with food by photosynthesising.
Nucleus	The NUCLEUS contains DNA (genetic material), which controls the activities of the cell.	Multicellular	A MULTICELLULAR organism is made of more than one cell e.g. all animals and plants	Guard cell	The role of a GUARD CELL is to regulate the amount of water a plant loses and allow gas exchange to occur.
Cytoplasm	The CYTOPLASM is a jelly-like fluid in the cell where most chemical reactions take place.	Unicellular	A UNICELLULAR organism is made of only one cell e.g. bacteria	Respiration	RESPIRATION is a process in which energy is released from glucose, for cells to use.
Cell membrane	The CELL MEMBRANE holds the cell together and controls the movement of substances into and out of the cell.	Specialised cell	A SPECIALISED CELL has specific structures that help it to perform a specific function.	Photosynthesis	PHOTOSYNTHESIS is the process which uses light energy make food (glucose). It occurs in the chloroplasts of cells.
Mitochondria	Most reactions for aerobic respiration take place inside the MITOCHONDRIA, which releases energy for the cell.	Diffusion	DIFFUSION is the net movement of particles from an area of high concentration to an area of low concentration.	Scientific Techniques	
Cell wall	The CELL WALL supports the cell and prevents it from bursting. It is made out of cellulose.	Microscopy	MICROSCOPY is the use of a microscope to observe objects too small to see with the naked eye		
Vacuole	The VACUOLE contains cell sap made from sugar, salts and water. It keeps the cell rigid.	Stain	A STAIN is a coloured dye that makes parts of cells visible under the microscope.	Specimen	A SPECIMEN is the sample that you are observing e.g. cheek cells.
Chloroplast	CHLOROPLASTS carry out photosynthesis to make food (glucose) for the plant. They contain a green pigment called chlorophyll, which absorbs light.	Magnify	MAGNIFY is to make something appear bigger.	Coarse focus knob	The COARSE FOCUS KNOB is the large wheel on a microscope that you turn to focus (get a clear image) the specimen.
Kingdom	A KINGDOM is a group of related organisms.	Objective lens	The OBJECTIVE LENS increases the <i>magnification</i> of the specimen.	Fine focus knob	The FINE FOCUS KNOB is the small wheel on the microscope you turn to fine-tune the focus on the specimen.