



Section 1: Key Vocabulary	
Key Word	Definition
Nucleus	Where the genetic information is found
Cytoplasm	Jelly like substance where chemical reactions take place
Cell Membrane	Surrounds the cell and holds the cell together. Controls what can enter and leave the cell.
Chloroplasts	Contain chlorophyll (green pigment) for photosynthesis
Cell Wall	Supports the cell
Vacuole	Where the plant stores sap
Diffusion	The random movement of particles from an area of high concentration to an area of low concentration
Partially Permeable	Only allows certain substances to pass through
Cell	The basic building blocks of life
Organelle	A tiny cellular structure that performs specific functions within a cell
Tissue	A group of cells that work together to perform a function
Organ	A group of tissues that work together to perform a function
Organ System	A group of organs working together to perform a function
Organism	An individual animal or plant

Section 2: Quick Questions	
What structures are only found in plant cells?	Only plant cells contain cell walls, chloroplasts and vacuoles
What is the role of chlorophyll?	Chlorophyll carry out photosynthesis - converting light into glucose
What is a stem cell?	An undifferentiated cell that is capable of becoming various different cells
What is a specialised cell?	A specialised cell whose form (shape) is adapted to fit a specific function (job)
What is the role of a red blood cell and how is it adapted?	A red blood cell carries oxygen. It has a biconcave shape, is flexible and lacks a nucleus
What is the role of a sperm cell and how is it adapted?	A sperm cell fertilises the egg cell. It has a tail, a streamlined head and half of the genetic information
What is the role of a root hair cell and how is it adapted?	A root hair cell absorbs water from the soil. It is a long 'hair' that increases these surface area
How do we look at cells?	We use microscopes that magnify the size of cells so we can see them
How do cells link to organ systems?	A group of cells work together to form a tissue, which form together to form organs, which work together to form an organ system

Section 3: Helpful Diagrams

Animal cell

Plant cell

STEM CELLS

Section 4: Video Links