

7A Cells, Tissues, Organs and Systems

1. Life Processes

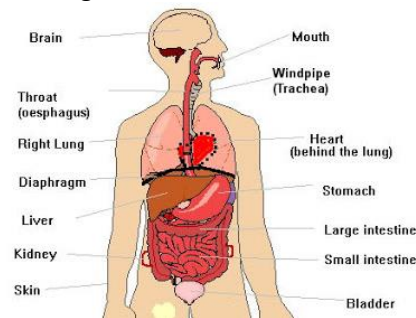
Life Processes	If something can do all 7 life processes it is considered a 'living thing' They are; movement, reproduction, sensitivity, growth, respiration, excretion and nutrition.
Organism	A living thing.
Movement	Being able to move from place to place or move part of themselves.
Reproduction	Being able to make more living things like themselves.
Sensitivity	Being able to sense and react to things around them.
Growth	Being able to increase in size.
Respiration	Being able to release energy through respiration.
Excretion	Being able to get rid of waste materials.
Nutrition	Taking in substances (such as food) to help carry out the other processes.

2. Organs

Organ	A part of animals or plants that does an important job- made up of different tissues.
Function	The job or role something has.
Brain	Controls the body.
Skin	The bodies biggest organ- used for protection and sensing things.

Lungs	Take in oxygen for respiration and excrete carbon dioxide.
Heart	Pumps blood around the body.
Liver	Makes and destroys substances.
Kidneys	Clean the blood and produce urine to excrete waste.
Bladder	Stores urine.
Stomach	Breaks up food.
Small Intestine	Breaks up food and absorbs it.
Large Intestine	Removes water from unwanted food.
Rectum	Stores faeces (waste material)

Human Organs



Leaf	Traps sunlight to make food for a plant.
Stem	Carries substances around a plant.
Root	Holds the plant in place and takes in water and other substances.
Photosynthesis	The process by which a plant makes its own food.

3. Tissues

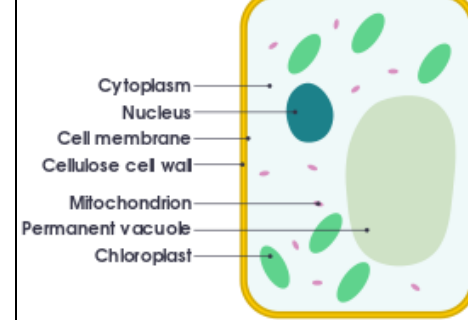
Tissues	Groups of the same cells doing the same job- make up organs.
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The Heart	Made up of muscle tissue so it can move and pump the blood as well as fat tissue to protect it.
Root Hair Tissue	Small hairs on the outside of roots which help to take in as much water as possible.
Xylem Tissue	The tissue which carries water up through plants from the roots.

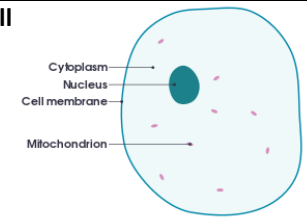
4. Cells

Cells	The basic units from which all tissues and living things are made from.
Specialised	When something has features that allow it to do a particular job.
Cell Surface Membrane	Controls what enters and leaves the cell.
Nucleus	Controls the cell.
Cytoplasm	Jelly like substance where chemical reactions happen.
Mitochondria (<i>mitochondrion- singular</i>)	Where respiration happens.
Chloroplasts	Make food for the plant using photosynthesis- contains chlorophyll.
Cell Wall	Strengthens and supports the cell- made of cellulose.
Vacuole	Storage space filled with cell sap.

Plant Cell



Animal Cell



5. Organ Systems

Organ Systems	A collection of organs working together.
Circulatory System	<i>Heart, blood vessels</i> Carries oxygen and nutrients around the body.
Digestive System	<i>Gullet, stomach, intestines</i> Breaks down food and takes nutrients into the blood.
Locomotor System	<i>Muscles, bones</i> Enables the body to move.
Urinary System	<i>Kidneys, bladder</i> Gets rid of waste materials produced in the body.
Breathing System	<i>Lungs, trachea</i> Allows exchange of gases between blood and lungs.
Nervous System	<i>Brain, nerves, spinal cord</i> Allows the body to sense things and react to them.
Water Transport System	<i>Roots, stem, leaves</i> Transports water around the plant.

Lesson	Memorised?
1. Life Processes	
2. Organs	
3. Tissues	
4. Cells	
5. Organ Systems	