

# Year 7 Cells Knowledge Organiser

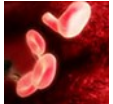
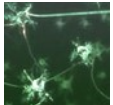
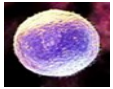


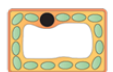
## 1. Keywords

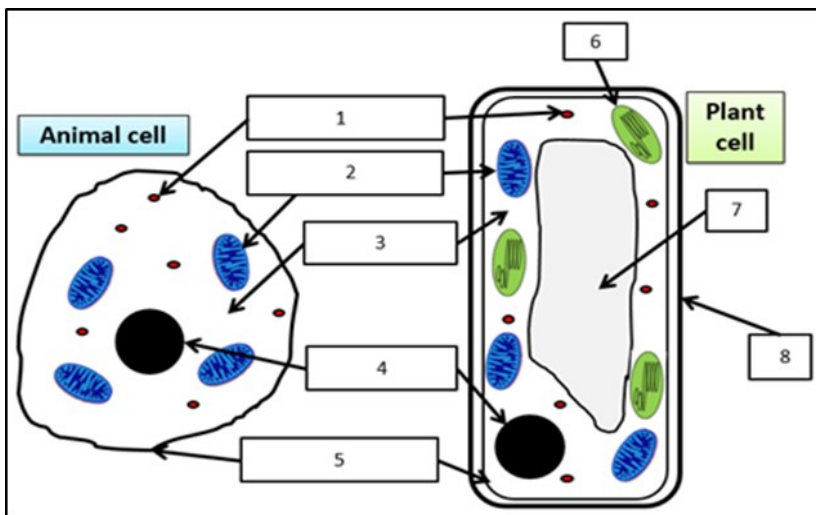
<b>Cells:</b>	The building blocks of all living things
<b>Organelle</b>	A cell structure that has a specific function
<b>Unicellular</b>	Simple organisms made up of just one cell
<b>Diffusion</b>	The random movement of a substance from an area of high concentration to an area of low concentration
<b>Specialized Cells</b>	Where a cell has adapted in order to carry out a specialised job
<b>Microscope</b>	An instrument that magnifies objects, enabling visibility of 1000 times or more than what can be seen by the naked human eye

## 2. Cell organelles

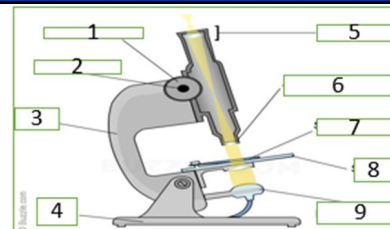
No.	Structure	Function
1	<b>Ribosomes</b>	Where proteins are made from amino acids
2	<b>Mitochondria</b>	Where respiration occurs and energy is produced
3	<b>Cytoplasm</b>	Where chemical reactions occur
4	<b>Nucleus</b>	Contains genetic material
5	<b>Cell Membrane</b>	Controls the movement substances into and out of the cell
<b>Only in Plant cells</b>		
6	<b>Chloroplasts</b>	Absorb light for photosynthesis
7	<b>Vacuole</b>	Keeps the cell turgid to support the plant
8	<b>Cell Wall</b>	Strengthens the cell

## 3. Specialised Cells

Cell	Function
	Red Blood Cells- carry oxygen
	Nerve Cells- carry nerve impulses
	Egg Cells- meet up with male sperm cells, then produce food or new cells being formed
	Sperm Cells- meet up with female egg cells
	Root Hair Cells- to absorb water and minerals
	Leaf Cells- to absorb sunlight for photosynthesis



## 4. The Microscope



1 Coarse Focus	4 Base	7 specimen
2 Fine focus	5 Eyepiece	8 Stage
3 Arm/spine	6 Objective	9 Light/mirror

## 5. Unicellular and multicellular

Cell	The structural, function and biological unit of all organisms
Tissue	Made from a group of cells with a similar structure and function, which all work together to do a particular job
Organ	Made from a group of different tissues, which all work together to do a particular job
Organ System	Made from a group of different organs, which all work together to do a particular job