

Teaching notes

This resource is designed for the new AQA Trilogy specification but would be suitable for any KS4 Biology specification.

The table needs to be cut out and divided into two along the dotted lines. The individual cards then need to be cut out. They should look like this.

Tiny pores in the epidermis of the leaf.	organ
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Students start with the card indicated as the start point and then match keywords with their descriptions until they end back at the starting point. This works well for revision and can be completed individually or in small groups.

Tiny pores in the epidermis of the leaf.	organ	The basic unit of living things.	cell membrane
Chemicals and other agents that cause cancer.	ribosomes	Small rings of DNA found in bacterial cells	differentiation
Where most of the chemical reactions take place in a cell.	plasmid	Where aerobic respiration takes place.	stem cell
Surrounds the cell and controls the passage of substances into and out of the cell.	vacuole	Long strands of DNA found in cells.	chloroplast
Cells which surround the stomata and control its opening and closing.	xylem	Type of cell that contains a nucleus	spongy mesophyll
Found outside the cell membrane in plant and bacterial cells, provides support for the cell.	phloem	Water travels through this tissue from the roots to the leaves.	cancer
The movement of water through the plant and leaves.	Start cell	Found in plant cells. Contain a fluid called cell sap.	mitosis
Groups of organs that work together.	prokaryotic	The movement of sugars in plants.	transpiration

Type of cell division that produces two new (identical) cells.	stomata	A group of tissues working together to perform a specific function.	chromosome
Found in plant cells. Contain chlorophyll that absorbs light for photosynthesis.	eukaryotic	Sugars are transported through this tissue in plants.	daughter cell
The cells that are produced in cell division.	cytoplasm	Tissue found in the lower layer of the leaf, with spaces between the cells to allow gases to diffuse.	specialised
Cells that have a particular job/function.	mutation	Where protein synthesis occurs.	guard cells
A group of cells with a similar structure and function.	mitochondria	Unspecialised cells that can become other types of cells.	organ system
Contains DNA and controls cell activities.	carcinogen	When cells become specialised to do a particular job.	tissue
Cells without a true nucleus.	palisade	Tissue found in the upper layer of the leaf, packed with chloroplasts for photosynthesis.	nucleus
A condition resulting from changes in cells that leads to their uncontrolled growth, division and spread.	translocation	A change in the DNA of a cell.	cell wall

Q	Answers
1	The movement of water through the plant and leaves. (Answer to the last card).
	Start: cell
2	The basic unit of living things.
	cell membrane
3	Surrounds the cell and controls the passage of substances into and out of the cell.
	vacuole
4	Found in plant cells. Contain a fluid called cell sap.
	mitosis
5	Type of cell division that produces two new (identical) cells.
	stomata
6	Tiny pores in the epidermis of the leaf.
	organ
7	A group of tissues working together to perform a specific function.
	chromosome
8	Long strands of DNA found in cells.
	chloroplast
9	Found in plant cells. Contain chlorophyll that absorbs light for photosynthesis.
	eukaryotic
10	Cells that contain a nucleus.
	spongy mesophyll
11	Tissue found in the lower layer of the leaf, with spaces between the cells to allow gases to diffuse.
	specialised
12	Cells that have a particular job/function.
	mutation
13	A change in the DNA of a cell.
	cell wall
14	Found outside the cell membrane in plant and bacterial cells, provides support for the cell.
	phloem
15	Sugars are transported through this tissue in plants.
	daughter cell
16	The cells that are produced in cell division.
	cytoplasm

Q	Answers
17	Where most of the chemical reactions take place in a cell.
	plasmid
18	Small rings of DNA found in bacterial cells.
	differentiation
19	When cells become specialised to do a particular job.
	tissue
20	A group of cells with a similar structure and function.
	mitochondria
21	Where aerobic respiration takes place.
	stem cells
22	Unspecialised cells that can become other types of cells.
	organ system
23	Groups of organs that work together.
	prokaryotic
24	Cells without a true nucleus.
	palisade
25	Tissue found in the upper layer of the leaf, packed with chloroplasts for photosynthesis.
	nucleus
26	Contains DNA and controls cell activities.
	carcinogen
27	Chemicals and other agents that cause cancer.
	ribosomes
28	Where protein synthesis occurs.
	guard cells
29	Cells which surround the stomata and control its opening and closing.
	xylem
30	Water travels through this tissue from the roots to the leaves.
	cancer
31	A condition resulting from changes in cells that leads to their uncontrolled growth, division and spread.
	translocation
32	The movement of sugars in plants.
	transpiration