

1. Answer the following questions.

i. Name three different types of specialized cells.

Red blood cells:

Epithelial cells:

Bone cells:

ii. What is the function of a cell membrane?

iii. What is the name of the green-coloured pigment inside chloroplasts?

iv. What is a tissue?

v. What is the function of a cytoplasm?

vi. What is an organ? Name any three organs in a human body.

2. Long answer questions:

- i. A plant and an animal cell are similar in some ways yet very different in others. Compare the two types of cells in a paragraph and draw labelled diagrams.

Plant cell	Similarities	Animal cell

- ii. Draw a labelled diagram of a plant and write the functions of the main organs of a flowering plant.

Roots:

Stem:

Leaves:

Flowers:

iii. What is a tissue? What is the job of smooth muscle tissue?

Smooth muscle tissue:

iv. Differentiate between organ and tissue.

Tissue	Organ

3. Think about it:

i. Why do you usually need to cut a very thin slice of a specimen to look at it under a light microscope?

ii. Why are cells stained or dyed before being looked at with a light microscope?

4. Tick the right option.

1. What is the main difference between plant and animal cells?

- | | | | |
|---|-----------------------------|---|--|
| a) Plant cells have a nucleus, animal cells do not. | b) Animal cells move about. | c) Plant cells have a cell wall which is easily seen. | d) Animal cells are always bigger than plant cells |
|---|-----------------------------|---|--|

2. Which one of the following substance in a cell traps sunlight?

- | | | | |
|--------------|-------------|--------------|----------------|
| a) Cytoplasm | b) Cell sap | c) Cellulose | d) chlorophyll |
|--------------|-------------|--------------|----------------|

3. The job of the cell membrane is to.

- | | | | |
|--------------------------------|---|---|---------------------------------|
| a) Give a plant cell its shape | b) Control what happens inside the cell | c) Control what substances go into and out of the cell. | d) Stop water entering the cell |
|--------------------------------|---|---|---------------------------------|

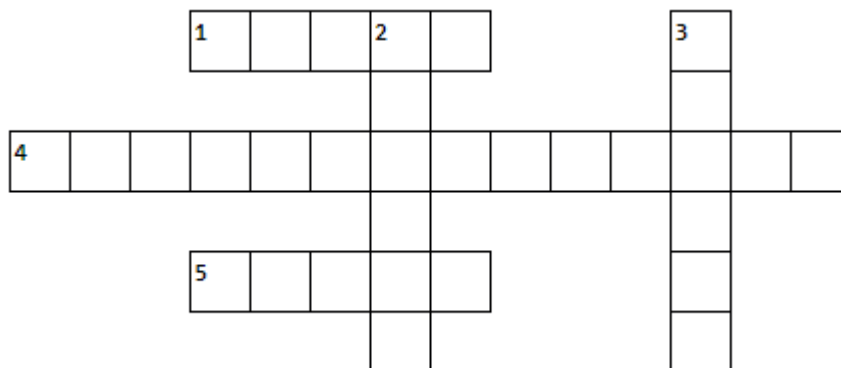
4. The job of the cell wall in a plant is to.

- | | | | |
|--|--------------------------------|-----------------------------------|-----------------------------|
| a) Control what substances go into and out of the cell | b) Give a plant cell its shape | c) Allow photosynthesis to happen | d) Store food for the plant |
|--|--------------------------------|-----------------------------------|-----------------------------|

5. What sort of structure is the heart?

- | | | | |
|-------------|-------------|--------------------|---------------------|
| a) A tissue | b) An organ | c) An organ system | d) A group of cells |
|-------------|-------------|--------------------|---------------------|

3. Crosswords



Across

1. Connective tissue.
4. Mesophyll cells.
5. Root hair cells absorb.

Down

2. Red blood cells carry.
3. Group of cells.

4. Words Search

Cardiac	Kidney	Phloem	Nervous	Mesophyll
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N	E	R	V	O	U	S	N	Z	U	E	L
X	W	G	N	R	S	U	B	C	X	R	K
G	B	Y	O	K	L	M	T	W	B	T	I
U	M	E	S	O	P	H	Y	L	L	U	D
N	F	P	G	J	H	L	N	W	B	M	N
E	K	O	R	W	Y	I	O	P	A	I	E
T	L	S	Z	I	A	L	K	Q	Z	K	Y
Q	P	S	A	Y	E	W	R	Z	C	M	B
P	W	D	P	H	L	O	E	M	Q	B	P
V	Y	O	B	N	M	S	T	U	V	C	O
Q	C	A	R	D	I	A	C	X	Q	X	W

5. Jumbled Words

- i. OICROSMCPE _____
- ii. DALIPSAE _____
- iii. DONENC SER _____
- iv. GPOS NY _____
- v. ROASCE _____
- vi. LPITEHEIAL _____
- vii. GIAPHRDAM _____
- viii. XORTCE _____
- ix. TKELESAL _____
- x. SNITETINE _____

6. Columns

Match the column A with column B.

Column A

They move parts of the body by their ability to contract.

They perform protection and secretion.

They make the bones that support our body.

They carry oxygen around the body in blood.

They receive and send message from the body to the brain and back to the body.

Column B

● Red blood cells

● Epithelial cells

● Nerve cells

● Bone cells

● Skeletal cells

7. Fill in the blanks using the given words.

bigger	unicellular	more than one	tissues	tissue
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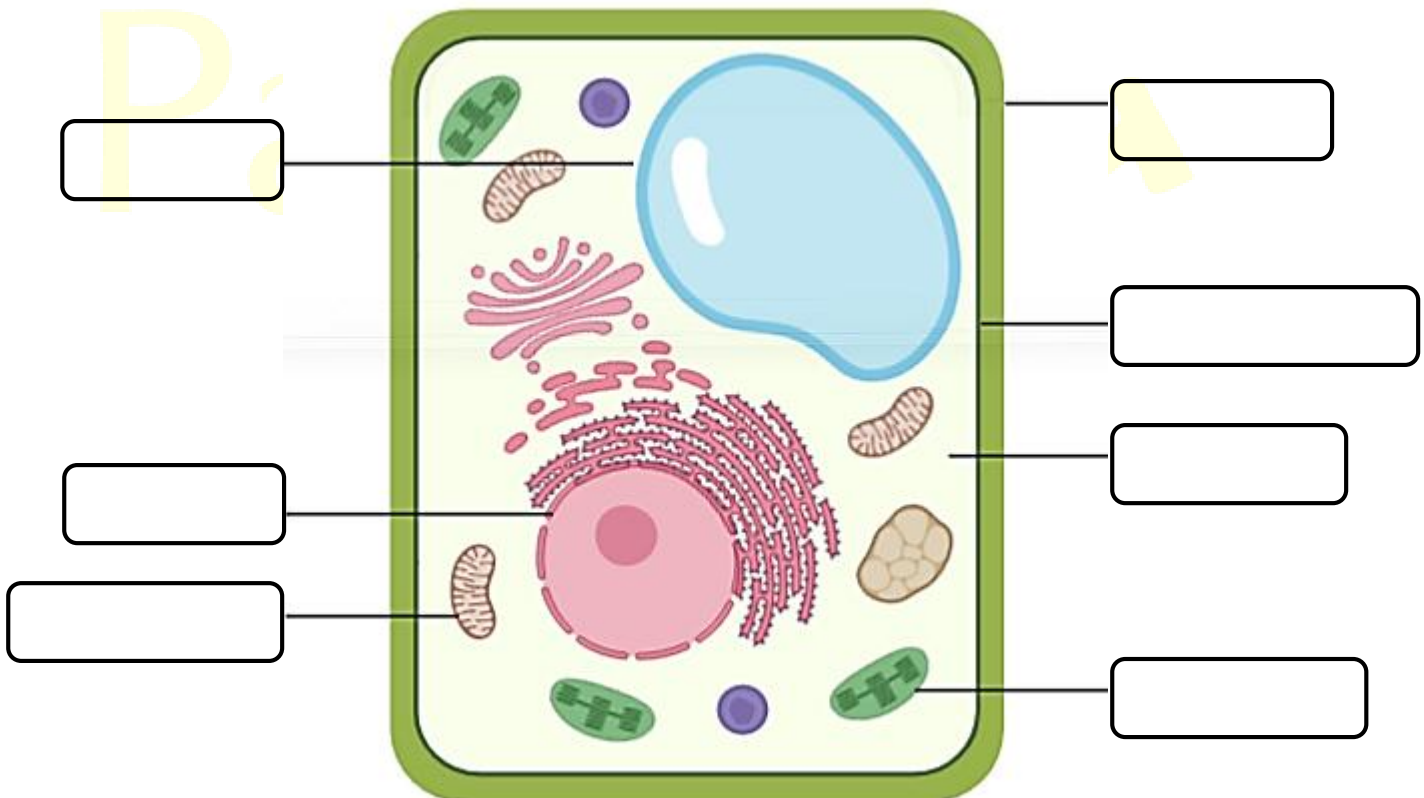
- i. A group of similar cells is called a _____.
- ii. The glass of the in the microscope bends light waves in a way that makes an object look _____.
- iii. An organ is made from a group of different _____ which all work together to do a particular job.
- iv. Organisms which are made up of one cell are called _____.
- v. Multicellular organisms are made up of _____ number of cells.

8. Write “T” for the true and “F” for the false statement.

- i. Only plant cells have chloroplasts.
- ii. Animal cells are rigid, but plant cells are floppy.
- iii. The nucleus of a cell controls its actions.
- iv. A group of similar cells is called a tissue.
- v. The chloroplasts in a plant cell carry out respiration.





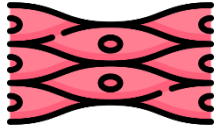
9. Label the diagram.

A Plant Cell



10. Drag and Drop

Look at the pictures and write their names in the relevant column.

				
Cell wall	Small or animal vacuole	Chloroplast	Mitochondria	Skeletal muscle

Functions

Names

Stores waste material.

 Produces energy for cell.

Give a plant cell its shape.

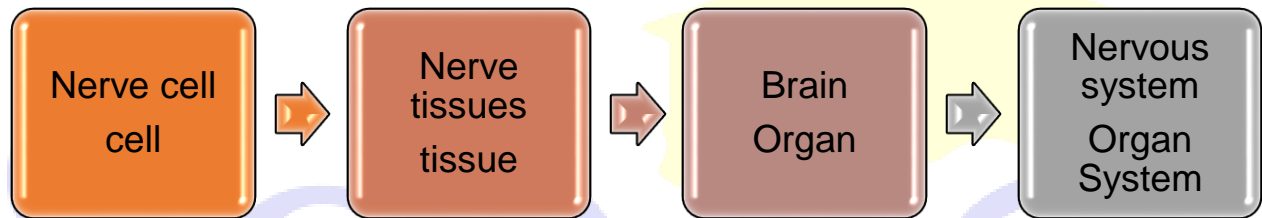
 Performs photosynthesis.

Move different parts of body.

11. Comprehension

Answer the following questions after reading the paragraph.

Cellular organization refers to the hierarchical structure within living organisms, where cells are the fundamental units of life. At this level, cells perform specific functions and work together to form tissues, organs, and organ systems. Understanding cellular organization is crucial in comprehending the complexity of living organisms. The hierarchy of human levels of organization for nervous system is as follows:



i. **What is cellular organization?**

Ans: _____

ii. **What are the fundamental units of life?**

Ans: _____

iii. **What is the hierarchy of human levels of organization for nervous system?**

