

Chapter 6 Model of Cells

Date: _____

Topical Worksheet

SECTION A – MCQ

Each question is provided with **four** possible answers (**A**, **B**, **C** and **D**). Select the most appropriate answer and **write** your choice in the **brackets** provided.

- 1 Which part of the cell controls activities that take place in a cell?

A chromosome	B vacuole
C nucleus	D cytoplasm

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- 2 Which one of the following is found in both plant and animal cells?

A cell wall	B starch grains
C chloroplast	D plasma membrane

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- 3 The function of the plasma membrane is to _____.

A provide the cell with a regular shape
B allow the passage of substances across
C allow only certain substances to pass through
D provide support for the cell

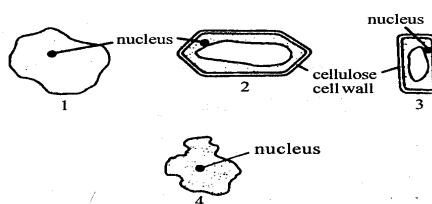
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- 4 A process known as _____ takes place in the _____ of cells to release energy through the breakdown of food for cellular activities.

A digestion, mitochondria
B digestion, nucleus
C respiration, mitochondria
D respiration, nucleus

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- 5 The diagrams below show some plant and animal cells.



Which list correctly shows which cells are from animals and which are from plants?

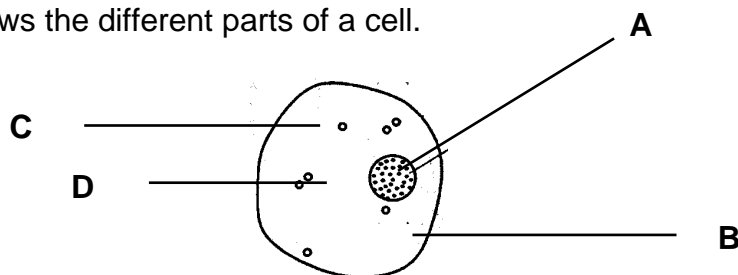
	Cell 1	Cell 2	Cell 3	Cell 4
A	Animal	Plant	Animal	Plant
B	Animal	Plant	Plant	Animal
C	Plant	Animal	Animal	Plant
D	Plant	Animal	Plant	Animal

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SECTION B - Structured Questions

Answer **ALL** questions in this section. Show your working and write your answers in the space provided.

- 1 The diagram shows the different parts of a cell.



- (a) Name the labelled parts A to D.

A: **B:**

C: **D:** [2]

- (b) Identify whether the cell above is a plant or animal cell. Explain your answer.

.....

.....

..... [2]

(c) Write down the functions of structures **A**, **B** and **C**.

A:

.....

.....

[3]

B:

.....

.....

[3]

C:

.....

.....

[3]

2 Complete the table below to show the structural similarities and differences between a plant and animal cell.

	Animal	Plant cell
Similarities	1.	
	2.	
Differences	1.	
	2.	
	3.	

[5]

- 3 Which of the cells below are likely to have the **most** mitochondria? Explain your answer.

Red blood cells, white blood cells, muscle cells, skin cells

[3]

- 4 The diagrams below show some structures from the human body that a scientist saw through his microscope. State the **function** of each structure in the human body.

(a)

Nerve cell



(b)

Muscle cell



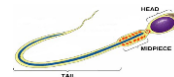
(c)

Red blood cells



(d)

Sperm cell



[4]

- 5 Name the tissue that does the following job.

Tissue	Function
N_____ tissue	Transmit messages in the form of electrical impulses around the body
M_____ tissue	Contract and relax to bring about movement in animals
C_____ tissue	Supports and binds other tissues together

[3]

6 Match the systems on the left to the organs on the right.

System		Organs	
Circulatory system	▪	▪	Lungs and trachea
Nervous system	▪	▪	Heart and blood vessels
Breathing system	▪	▪	Roots, stem and leaves
Digestive system	▪	▪	Stomach and intestines
Plant transport system	▪	▪	Brain and spinal cord

[5]

7 (a) What is the meaning of the term 'division of labour' in multicellular organisms?

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[2]

(b) State the significance of division of labour in multicellular organisms.

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[2]