B1 L1 Animal and plant cells: Exam questions worksheet

AQA GCSE Combined Science: Trilogy (8464) and Biology (8461)
Biology Paper 1 · Topic B1 Cell biology

Name _____ Class _____

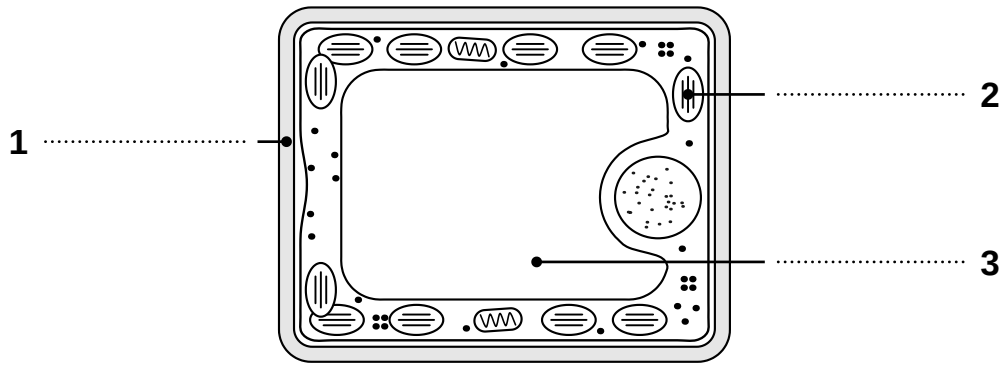
Total: ..... / 20

Instructions
- Answer **all** questions in the spaces provided.
- Use black ink or black ball-point pen.
- The marks for each question are shown in brackets.
- In calculations, show clearly how you work out your answer.
- Time: about 25 minutes.

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0 1 **Figure 1** shows a plant cell.

Figure 1



0 1 . 1 **Complete Figure 1**. [3 marks]

Choose answers from the box.

cell membrane	cell wall	chloroplast
mitochondrion	nucleus	permanent vacuole

0 1 . 2 What is the function of the cell wall? [1 mark]

Tick (✓) **one** box.

- It controls the activities of the cell. ☐
- It controls the movement of substances into and out of the cell. ☐
- It releases energy by respiration. ☐
- It strengthens the cell. ☐

Do not write outside the box

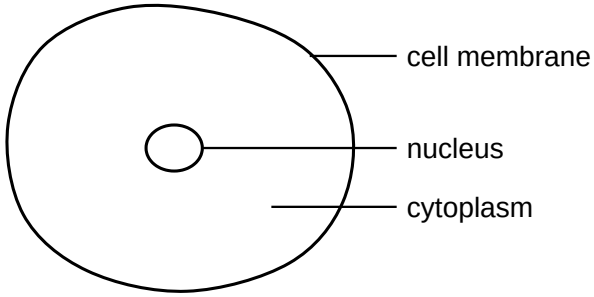
0 1 . 3 **Name** the substance that plant cell walls are made of. [1 mark]

.....

0 2 A student used a light microscope to look at cells from the inside of her cheek.

Figure 2 shows her drawing of one cheek cell.

Figure 2



A cheek cell

0 2 . 1 The cheek cell has no cell wall. [1 mark]

Give one other way that the cheek cell in **Figure 2** is different from the plant cell in **Figure 1**.

.....

.....

0 2 . 2 About 6 nuclei would fit side by side across the cheek cell. [2 marks]

The cheek cell is 48 µm wide.

Estimate the width of the nucleus.

Width = ... µm

0 2 . 3 The student could not see any mitochondria or ribosomes in the cheek cell. [1 mark]

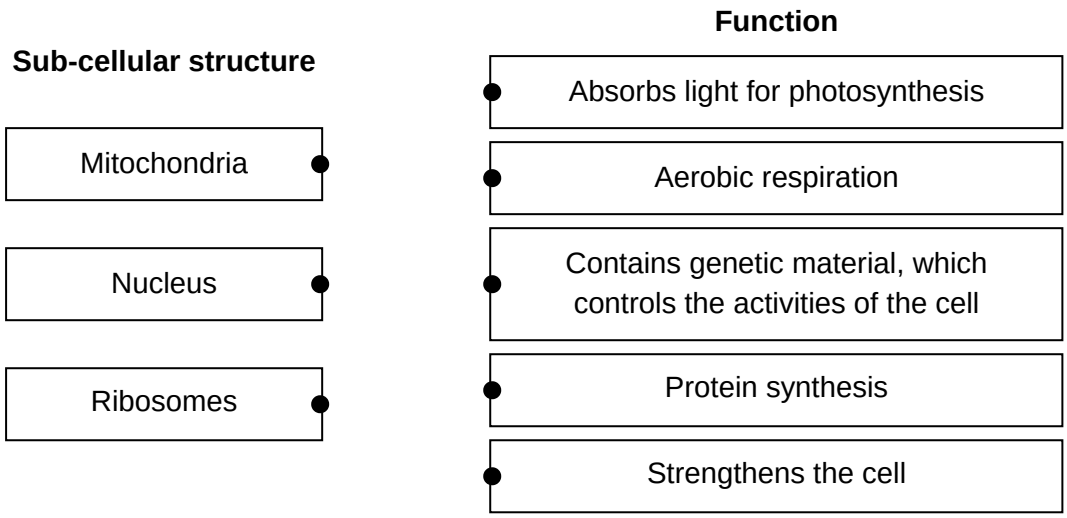
Suggest why.

.....

.....

Do not write outside the box

0 3 Draw **one** line from each sub-cellular structure to its function. [3 marks]



0 4 Plant cells have a permanent vacuole.

0 4 . 1 **Name** the liquid inside the permanent vacuole. [1 mark]

.....

0 4 . 2 **Give** the function of the permanent vacuole. [1 mark]

.....

Do not write outside the box

Turn over for the next question

0 5 A student looked at cheek cells and at leaf cells from pondweed with a light microscope. [6 marks]

Compare the structure of a cheek cell with the structure of a pondweed leaf cell.

In your answer, give the function of each structure you name.

Do not write outside the box

END OF QUESTIONS

There are no more questions in this paper. Original practice paper © sciencegcse.co.uk – free to use for non-commercial education. Not an AQA paper.