

**AQA, OCR, Edexcel**

# GCSE Science

## GCSE Biology

Animal and Plant Cell Questions

Name:

**M M E**

Mathsmadeeasy.co.uk

Total Marks: /22

Q1: Plant cells are specialised to use photosynthesis. What cellular component do plants use for this function?

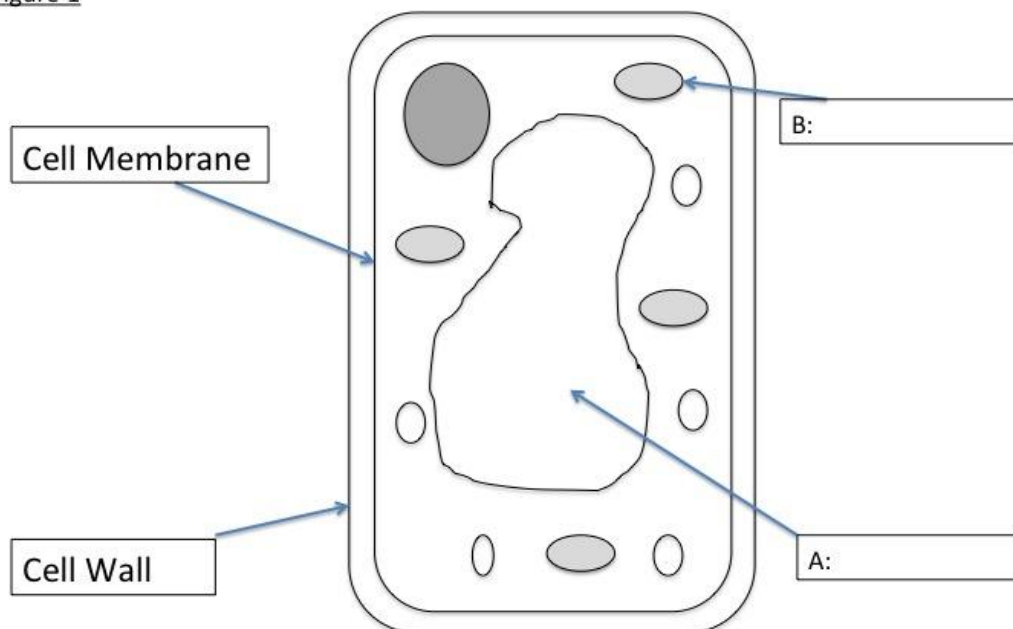
Tick one box.

- Vacuole
- Ribosomes
- Chloroplasts

(1 mark)

Q2: Figure 1 shows a diagram of a cell.

Figure 1



- a)  
i) What type of cell is shown in figure 1?

(1 mark)

Visit <http://www.mathsmadeeasy.co.uk/> for more fantastic resources.

ii) Label the two structures labelled A and B in figure 1.

(2marks)

iii) Figure 1 shows the cell wall and cell membrane. Discuss the functions of these cell components.

---

---

---

---

(2 marks)

iv) What is the cell wall in plants and algae made of?

---

(1 mark)

Q3: Draw and label an animal cell and its major structures.

(6 marks)

Q4: By what process do substances move across the cell membrane?

\_\_\_\_\_ (1 mark)

Q5: Animal and plant cells both contain a nucleus. What is the role of the nucleus?

\_\_\_\_\_ (1 mark)

Q6: i) Give the definition of turgid.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1 mark)

ii) What plant cell structure can be described as turgid?

\_\_\_\_\_ (1 mark)

Q7: Scientists want to examine onion cells under the microscope. The scientists prepare the onion cells by taking one sheet of cells from the epidermis of the onion and place the tissue on a glass slide. Iodine is used to dye the onion cells and a cover slip is placed on top of the sample. A light microscope is used to observe the cells.

i) Draw what the scientists would expect to see under the microscope.

(2 marks)

Visit <http://www.mathsmadeeasy.co.uk/> for more fantastic resources.

ii) What does the iodine stain in order to see the cells?

\_\_\_\_\_ (1 mark)

iii) Why can the scientists not see all of the cell components? Explain what the scientists could use to see the cells in more detail.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2 marks)