

Cells and Organisation (KS3)

Section A – Recall (1–2 marks each)

Q1. (1 mark)

What is the basic unit of life?

Q2. (1 mark)

Which organelle controls the activities of the cell?

Q3. (1 mark)

Name the part of a plant cell that contains chlorophyll.

Q4. (1 mark)

What is diffusion?

Q5. (1 mark)

Which tissue connects muscles to bones?

Q6. (2 marks)

State TWO differences between plant and animal cells.

Q7. (1 mark)

State one function of the cell membrane.

Q8. (1 mark)

Why are mitochondria important in cells?

Q9. (1 mark)

State the function of the cell wall.

Q10. (1 mark)

State the function of the cytoplasm.

Q11. (1 mark)

State the function of the vacuole in plant cells.

Section B – Understanding (2–3 marks each)

Q12. (2 marks)

Explain how diffusion helps substances move in and out of cells.

Q13. (3 marks)

Explain how to use a light microscope to observe cells.

Q14. (3 marks)

Explain how a flagellum is an adaptation in unicellular organisms.

Q15. (3 marks)

Put these in order (smallest to largest): cell – tissue – organ – system – organism.
Then give one example of an organ system.

Q16. (3 marks)

Explain the function of chloroplasts and why they are only found in plant cells.

Q17. (2 marks)

Explain the two functions of the nucleus in a cell.

Section C – Application (4-5 marks each)

Q18. (4 marks)

Explain the similarities and differences between the functions of chloroplasts and mitochondria

Q19. (5 marks)

Explain how the skeletal and muscular systems work together to produce movement.

Section D – Extended Response (6 marks each)

Q20. (6 marks)

A student at *Learntit* observes onion cells using a light microscope. Describe how the student should carry out the investigation.

Your answer should include: apparatus used, how to prepare the slide, how to focus the microscope, what structures can be seen, why onion cells are plant cells.

Q21. (6 marks)

Explain how multicellular organisms are organised from cells to organ systems.

Your answer should include: cells, tissues, organs, organ systems, and an example too.

Total: ____ / 49
Percentage: ____%