



Cells

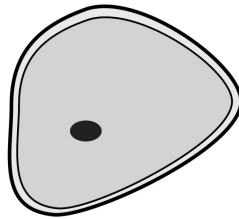
1 Fill in the missing words from the list below

bigger / multicellular / plants / prokaryotic / unicellular / pathogens / smaller / simpler / animals

Most eukaryotic organisms are **multicellular** and they include both animals and **plants**. Bacteria meanwhile are **prokaryotic** organisms which are **unicellular**. Their cells are generally **smaller** and **simpler** than eukaryotic cells.

[6 marks]

2 The figure below shows a simplified version of a cell.



2.1 Is it a eukaryotic or prokaryotic cell?



Eukaryotic



Prokaryotic

[1 mark]

2.2 Label the nucleus (black spot in middle), cytoplasm (grey substance filling cell) and cell wall (outer line that surrounds the cell) on the above diagram

[3 marks]

2.3 Give the function of these three structures

Nucleus - Stores the DNA of the cell

Cytoplasm - Jelly like substance that supports cell and provides site for chemical reactions

Cell wall - Controls what enters/leaves cell and provides support

[3 marks]

2.4 Add two more sub-cellular structures that can be found in plant cells to the diagram above

Draw mitochondria, ribosomes, chloroplasts, vacuole, Golgi apparatus, endoplasmic reticulum, or other suitable sub-sub-cellular structures.

[2 marks]

3 Which of these structure are found only in plant cells?



Cell membrane



Vacuole



Nucleus



Cell wall

GCSE Biology



Chloroplast



Flagella



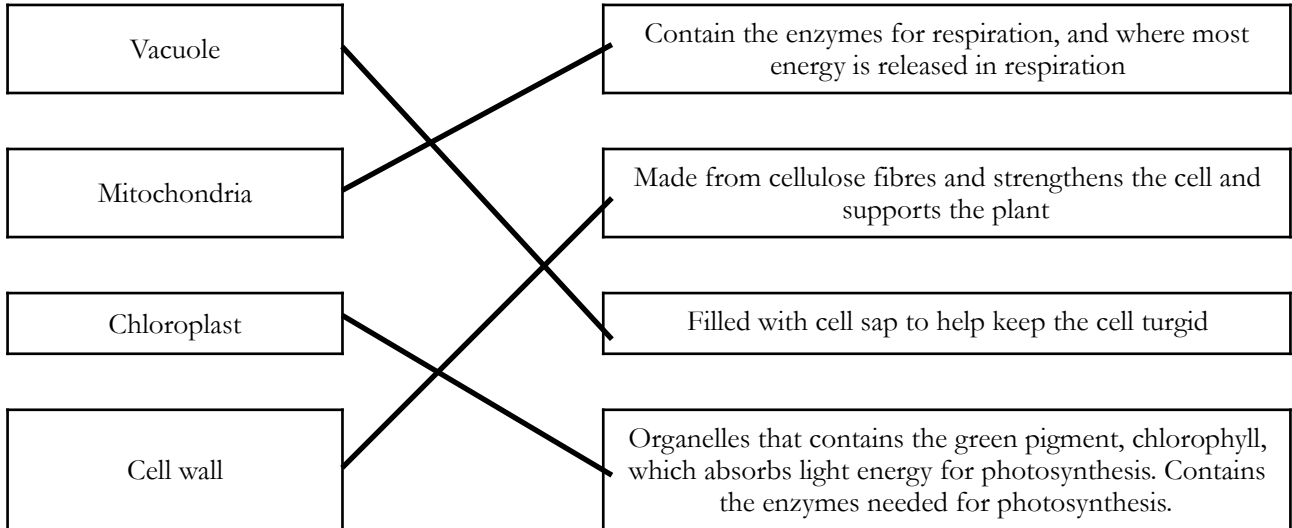
Mitochondria



Ribosomes

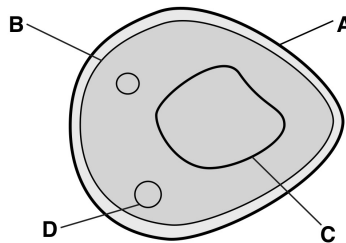
[2 marks]

4 Match the function of these organelles to their function



[4 marks]

5 The diagram below shows a prokaryotic cell



5.1 Name the structures labelled:

- A - Cell wall
- B - Cell membrane
- C - DNA
- D - Plasmid

[4 marks]

5.2 What is the difference between structures C and D?

C contains all of the genes that the bacteria needs to survive under normal conditions. D is a plasmid do contains extra genes that may occasionally be useful, such as antibiotic resistance.

[2 marks]

[Total - 27 marks]