

Animal cells and plant cells

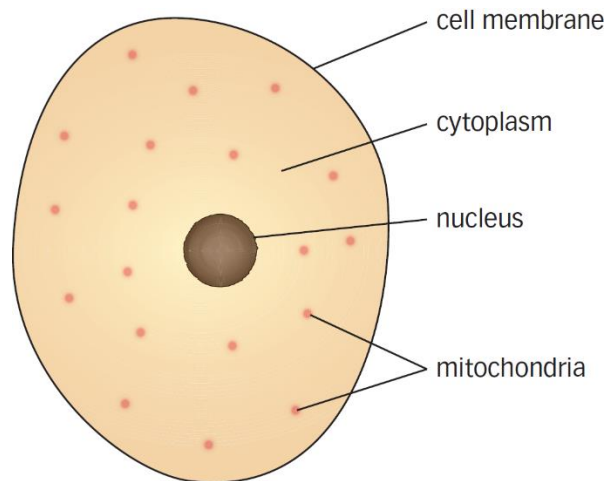
All living **organisms** are made of **cells**. Cells are the smallest units found in an organism.

Animal cells

Animal cells have an irregular shape.

They contain four components:

- a nucleus
- a cell membrane
- cytoplasm
- lots of mitochondria.



Quick question

Name the four components of an animal cell.

The components of a cell each have different functions:

- Nucleus – this controls the cell and contains genetic material. Genetic information is needed to make new cells.
- Cell membrane – this is a barrier around the cell. It controls what can come in and out of the cell.
- Cytoplasm – this is a 'jelly-like' substance where the chemical reactions in a cell take place.
- Mitochondria – this is where respiration happens. Respiration is a reaction that transfers energy for the organism.

Quick question

Give the function of the cell nucleus.

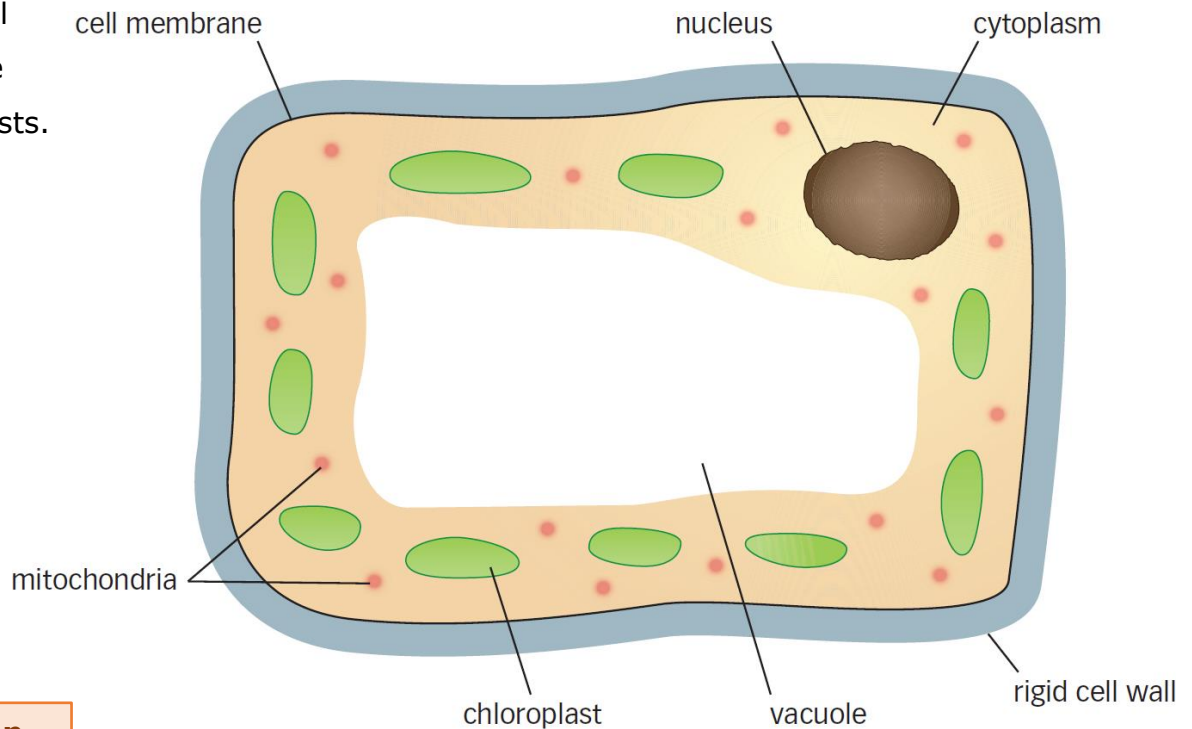
Plant cells

Plant cells have a more regular structure than animal cells.

They contain seven components. Like animal cells, they contain a nucleus, a cell membrane, cytoplasm, and many mitochondria.

Plant cells also contain:

- a cell wall
- a vacuole
- chloroplasts.



Quick question

Name the three components of plant cells that are not found in animal cells.

These components have their own function:

- Cell wall – this strengthens the cell and provides support. It is made of a tough fibre called cellulose, which makes the wall rigid.
- Vacuole – this contains a watery liquid called cell sap. It keeps the cell firm.
- Chloroplasts – this is where photosynthesis happens. Chloroplasts contain a green substance called chlorophyll, which traps energy transferred from the Sun.

Quick question

What is found inside a vacuole?