

The cell

Our planet is home to different types of living organisms, including plants, animals, fungi, algae and bacteria. All living organisms consist of tiny units called cells.

Living organisms can be unicellular or multicellular.

- In a unicellular organism, the cell performs all of the life processes.
- In a multicellular organism, different cells perform different functions.



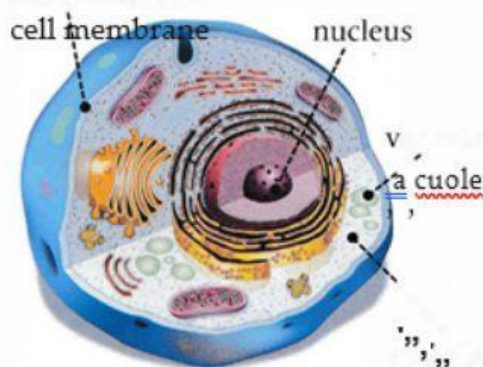
Closterium, a unicellular green alga

Animal and plant cells have some structures in common:

Animal cell structure

Animal cells have:

- A nucleus. It controls the activities of the cell, such as reproduction.
- a cell membrane. It controls the substances that enter and leave the cell.
- Cytoplasm. It is a jelly-like substance between the cell membrane and the nucleus. It contains various organelles and enzymes.
- Mitochondria. They are small and bean-shaped. They contain enzymes and respiratory which the organism needs to produce energy. Not all animal cells have one.



Plant cell structure

Plant cells have a cell wall, chloroplasts and large central vacuoles as well, but they also have:

- a cell membrane. It gives the cell its shape and controls it.
- Mitochondria. They contain enzymes so the plant can carry out the process of respiration.

