

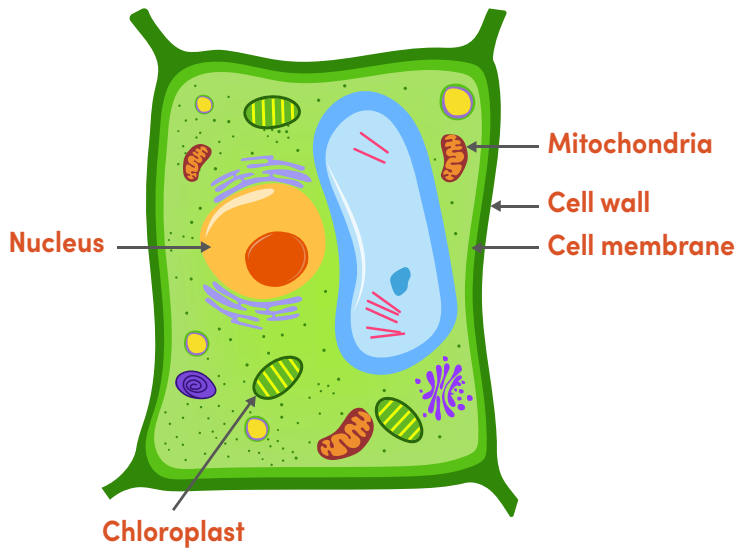
• • • CELL ORGANELLES • • •

A **cell** is the building block of all living things. All living things are made up of cells. An organism that consists of one single cell is called **unicellular**, while an organism that consists of many different cells is called **multicellular**.

Within a cell, special structures are responsible for particular functions. These structures are called **organelles**. Many different types of organelles work together so that the cell can function as a system.

The **nucleus** is often called the brain, or control center, of a cell. It contains genetic material and is responsible for cell growth and reproduction.

Chloroplasts are where photosynthesis occurs in plant cells. Photosynthesis produces sugars that plants can use for energy and growth. Chloroplasts contain a pigment called chlorophyll, which gives them a green color.



The **mitochondria**, often called the powerhouse of the cell, are where cellular respiration takes place. This is how the cell turns sugars into a usable form of energy.

The **cell membrane** is the cell's security guard. It forms the boundary that controls what enters and leaves the cell. It's semi-permeable, meaning only certain substances can pass through it.

The **cell wall** is the outer layer of a plant cell. It gives the cell strength and structure and serves as a protective barrier.

Show what you know about cell organelles! Summarize what you've learned by writing a sentence or two explaining the function of each organelle.

- 1 **Nucleus:** _____
- 2 **Chloroplast:** _____
- 3 **Mitochondria:** _____
- 4 **Cell Membrane:** _____
- 5 **Cell Wall:** _____