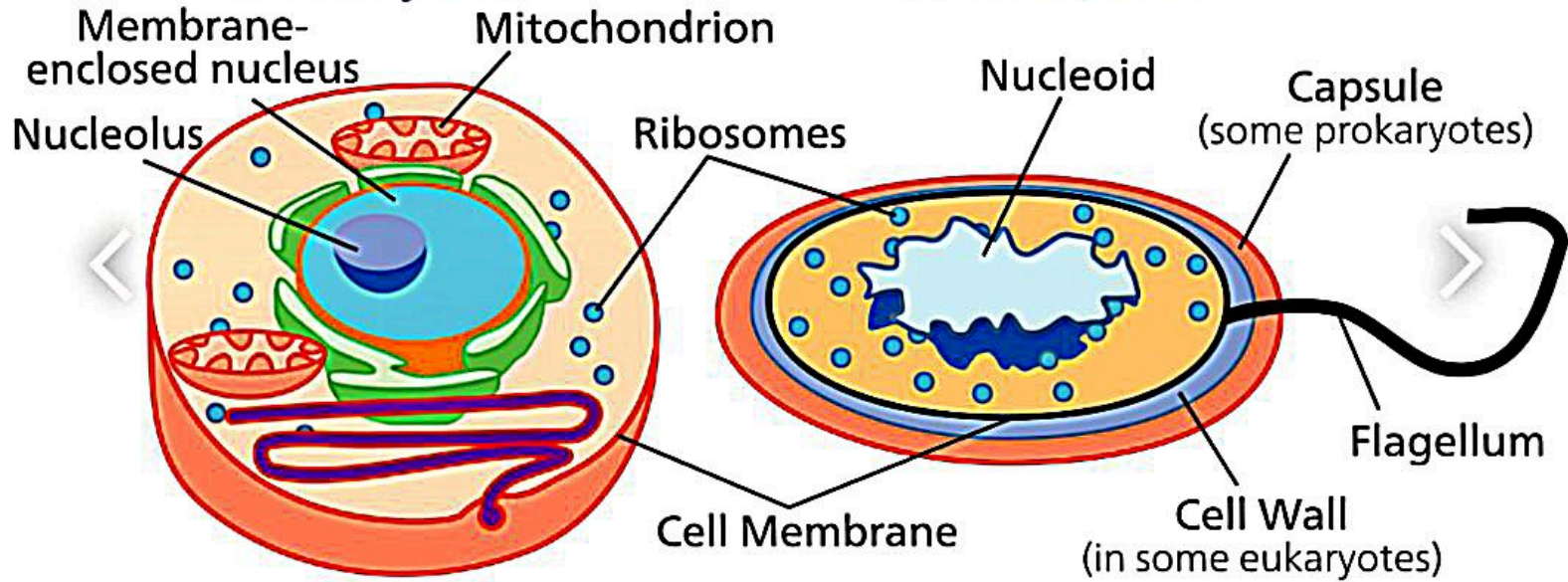


The **cell** (from [Latin *cella*](#), meaning "small room"^[1]) is the basic structural, functional, and biological unit of all known organisms. A cell is the smallest unit of life. Cells are often called the "building blocks of life". The study of cells is called [cell biology](#), cellular biology, or cytology.

Eukaryote

Prokaryote



Cells consist of **cytoplasm** enclosed within a **membrane**, which contains many **biomolecules** such as **proteins** and **nucleic acids**.^[2] Most plant and animal cells are only visible under a microscope, with dimensions between 1 and 100 **micrometres**.^[3] Organisms can be classified as **unicellular** (consisting of a single cell such as **bacteria**) or **multicellular** (including plants and animals).^[4] Most **unicellular organisms** are classed as **microorganisms**.

The number of cells in plants and animals varies from species to species; it has been estimated that humans contain somewhere around 40 trillion (4×10^{13}) cells.^{[a][5]} The human brain accounts for around 80 billion of these cells.^[6]

Cells were discovered by **Robert Hooke** in 1665, who named them for their resemblance to cells inhabited by **Christian monks** in a monastery.^{[7][8]} **Cell theory**, first developed in 1839 by **Matthias Jakob Schleiden** and **Theodor Schwann**, states that all organisms are composed of one or more cells, that cells are the fundamental unit of structure and function in all living organisms, and that all cells come from pre-existing cells.^[9] Cells emerged on Earth at least 3.5 billion years ago.^{[10][11][12]}