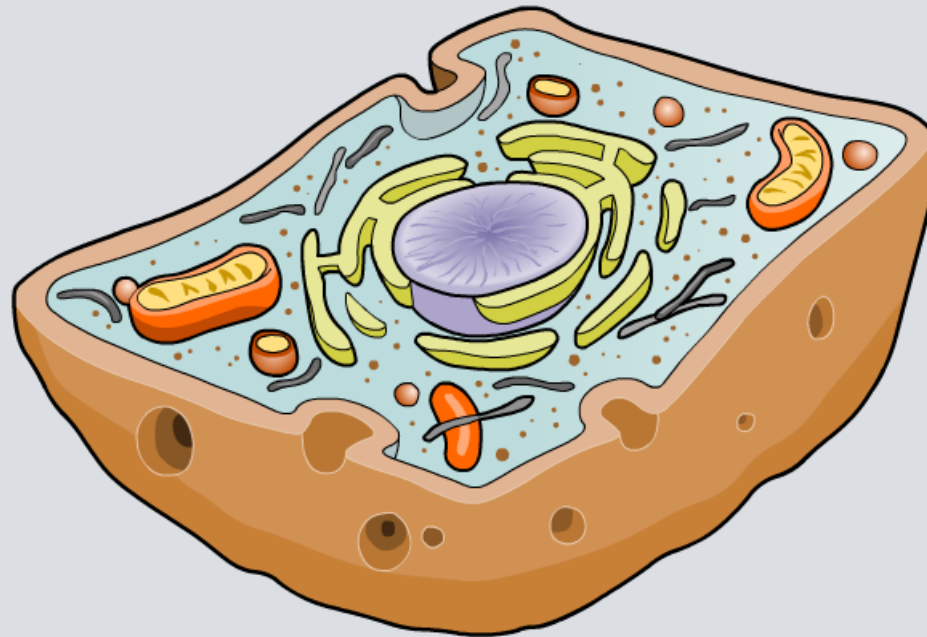


Cell Theory

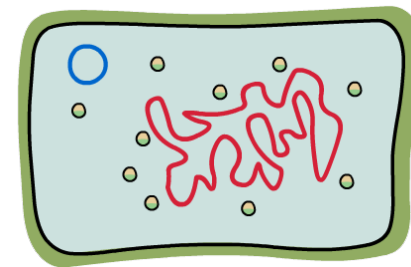
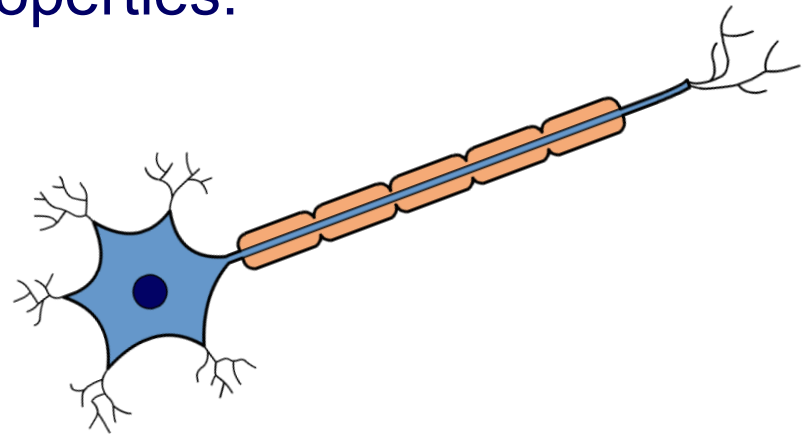


What is a cell?

Cells are the basic unit of life. They are small membrane-bound structures containing several smaller structures called **organelles**.

There are two main categories of cell, each of which have important different structural properties:

- **eukaryotic cell**, including the cells of animals and plants
- **prokaryotic cell**, including bacterial cells.



The discovery of the cell

Click on the dates on the timeline to find out more details about how the structure of the cell was discovered.



1665

1676

1838



The cell membrane and cytoplasm

All cells, and all true organelles, are contained within a membrane, based on a **phospholipid bilayer**.

The **cell membrane** holds a cell together and controls what enters and leaves the **cytoplasm**, as it is a selectively permeable barrier.

The cytoplasm comprises a liquid called **cytosol**, and all the organelles suspended in it (except the nucleus in eukaryotes).

The cell membrane and cytoplasm are universal features of the living cell.

