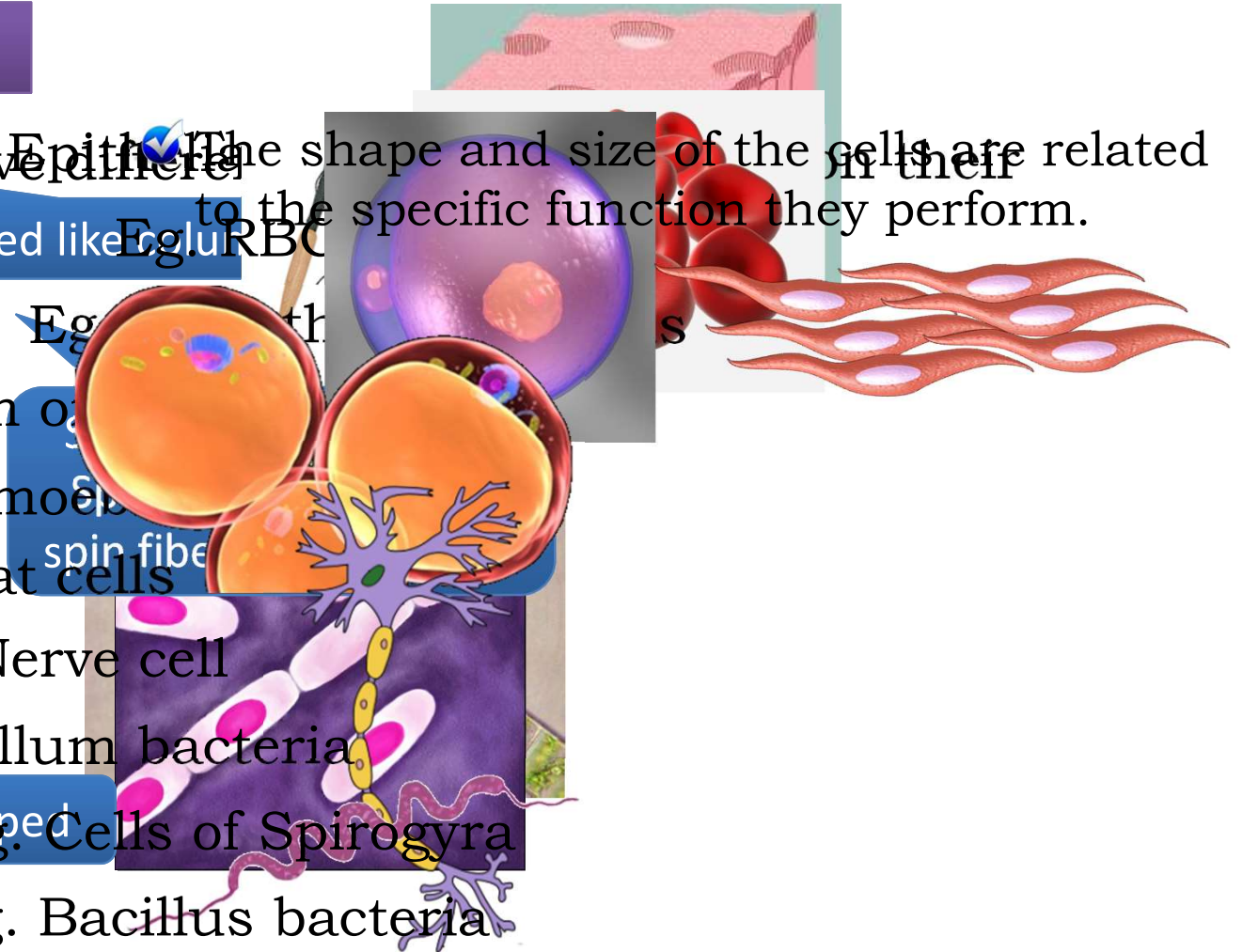


M2

Shapes of Cells

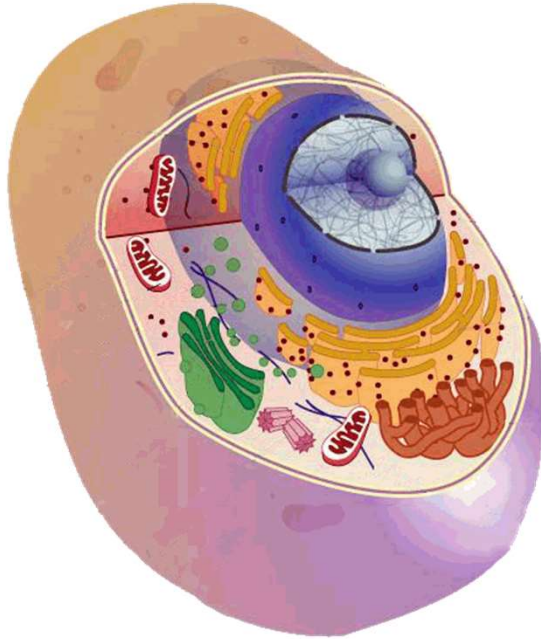
Different cells have different functions. The shape and size of the cells are related to the specific function they perform.

- Columnar Eg. Epithelial cells
- Circular Shaped like RBC
- Spindle shaped Eg. Muscle cells
- Oval Eg. Ovum of an animal
- Irregular Eg. Amoeba
- Circular Eg. Fat cells
- Branched Eg. Nerve cell
- Spiral Eg. Spirillum bacteria
- Rectangular Spring shaped Eg. Cells of Spirogyra
- Rod shaped Eg. Bacillus bacteria



Cell structure

A cell is made up of different components like



- ➡ Cell wall (Found only in plants)
- ➡ Plasma membrane
- ➡ Cytoplasm
- ➡ Cell organelles

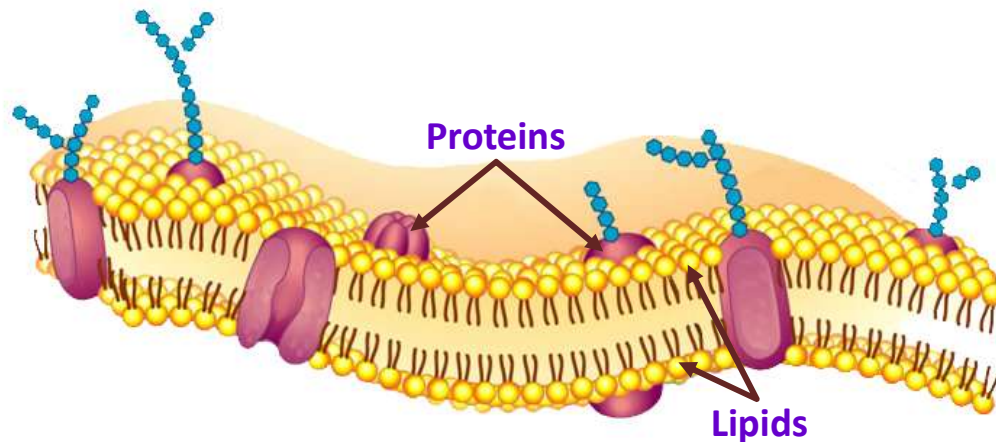
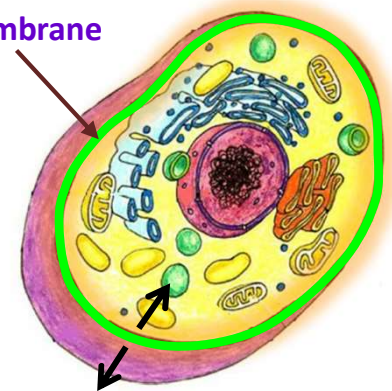
Let us see them one by one

Plasma membrane

It is also called as cell membrane

- ▶ It is the thin outer covering of a cell.
- ▶ It separates the contents of the cell from external environment.
- ▶ The plasma membrane is flexible and is made up of organic molecules called lipids and proteins.

Cell Membrane



Plasma membrane

- ▶ The plasma membrane allows or permits the entry and exit of some materials in and out of the cell.
- ▶ It also prevents the movement of some other materials.
- ▶ Therefore, the plasma membrane is called as a selectively permeable membrane.

How does the movement of substances take place inside and outside the cell?



- ▶ For e.g. when the concentration of CO_2 inside the cell increases, the CO_2 moves out of the cell by diffusion.
- ▶ Similarly when the concentration of O_2 inside the cell decreases, the O_2 moves from outside the cell.

From high
concentration to
low concentration

