

PROCESSES OF THE CELL

1.1 The cell is the basic unit of life. It is a small, self-contained unit that can perform all the functions of life. Cells are found in all living organisms, from simple organisms like bacteria to complex organisms like humans.



1.2 The cell membrane is a thin, flexible barrier that surrounds the cell. It is made of a phospholipid bilayer, which consists of two layers of phospholipids. The hydrophilic heads of the phospholipids face the outside and inside of the cell, while the hydrophobic tails face each other.

1.3 The cell wall is a rigid, protective layer that surrounds the cell. It is made of cellulose in plants and chitin in fungi. The cell wall provides structural support and protection against mechanical damage.

1.4 The nucleus is the control center of the cell. It contains the cell's genetic material, DNA, which is organized into chromosomes. The nucleus is surrounded by a nuclear envelope, which is a double membrane with nuclear pores. The nuclear pores allow for the exchange of materials between the nucleus and the cytoplasm.

1.5 The cytoplasm is the fluid-filled space inside the cell. It contains various organelles and is the site of many cellular processes. The cytoplasm is composed of water, salts, and organic molecules.

