WONDERS UNDER THE MICROSCOPE

VOLUME-1| ISSUE-4

BY FARIHA ZAMAN

Welcome to

WONDERS UNDER THE MICROSCOPE

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your Question of the last Month

Which Organelle has no membrane?

Here's the Answer

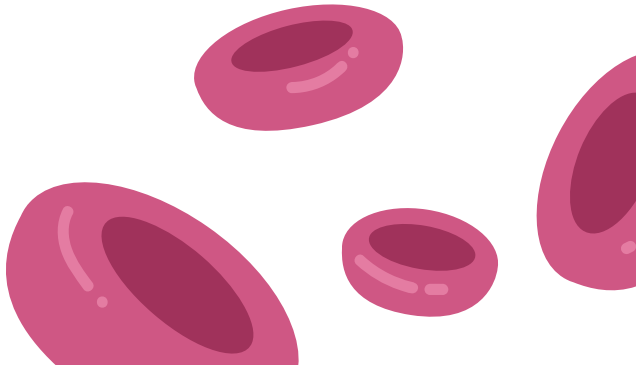
Ribosome

Characteristics of Living Organisms

1. Cellular Structure:

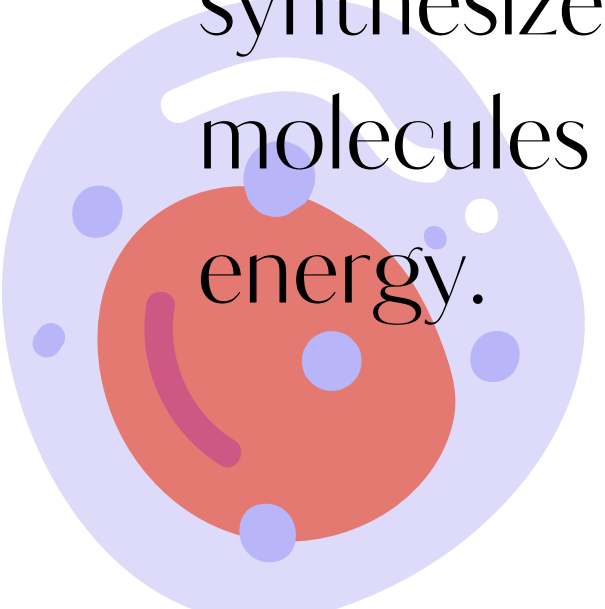
The body of living organisms is formed of specific units called Cells. Some organisms are represented by just one cell. These cells are called unicellular. (However, in modern biology, the term acellular is used for such organisms).

The body of most organisms is made up of many cells, they are called multicellular.
Humans are made up of tiny little units ca cells. Our body is formed by cells. These cells form the tissues-organ-organ system. The cells form the organism.
Based on cells, they are two types of organisms: Unicellular and Multicellular. Unicellular- one-cell organism and Multicellular- many-cell organism



2. Metabolism:

It is the sum total of all physical or chemical reactions occurring in an organism. These reactions are of two types: Anabolic or Catabolic. Anabolism is the constructive phase of metabolism in which complex compounds are synthesized from simpler molecules by spending energy.



Catabolism is the destructive phase of metabolism in which complex molecules are broken down to release energy. Metabolism is the total sum of all biological reactions occurring in any living cell, which are controlled by enzymes. These reactions are of two types synthesizing reactions (anabolism, e.g., photosynthesis) and breaking down reactions (catabolism, e.g., cell respiration)

3. Growth

Growth is defined as an irreversible increase in the dry weight of protoplasm in an individual. Growth is the increase in mass of an organism that occurs due to an increase in cell size or cell number.

The growth of an organism is an irreversible increase. The growth in the number of cells that occurs due to cell division is called hyperplasia, while the increase in the cell size is called hypertrophy.

4. Movement:

All living organism move in search of food and safety. In animals, it may be obvious in the form of locomotion as animals can walk. In plants, it is seen in the form of movement such as the movement of flowers towards the sun in sunflowers.

Locomotion is when the movement of a part of the body leads to a change in the position of an organism. Example: Animals.

Movement is when the living organism moves a body part or parts to bring without a change in the position of the organisms. Example: Plants such as sunflowers.

5. Nutrition:

It is the process of the intake and use of nutrients. This occurs in many different ways in different kinds of organisms, like green plants like autotrophs while others may be heterotrophs. Nutrition is the process of taking in food and converting it into energy and other vital nutrients required for life. Nutrients are the substances which provide energy and biomolecules necessary for carrying out the various body functions.

Question for the Month

What is consciousness?

will be answered in the next issue

Thank you

Instagram:
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