Life of a Cell

Abstract

Cells are the building blocks

The makeup larger organisms

Agenda

AIM:Teaching about Life of a Cell

AGENDA:

1. MCFRROGS
    a. Movement
    b. Communication
    c. Food
    d. Respiration
    e. Reproduction
    f. Organization
    g. Growth
    h. Stimulus
2. Bibliography

Movement

Cell Movement is concerned with all types of movement at a cellular level.

Active Transport Needs ATP:

- Hypotonic is low concentration of solvents
- Hypertonic is the concentration of solvents
- Exocytosis means to exit the cell
- Endocytosis means to enter the cell

Passive Transport Doesn't Require Energy:

- Molecules such as Osmosis and Diffusion

Communication

Using their own chemical language, cells are able to communicate with other cells and to other organelles.

The nucleus is the control center for the entire cell

Red Blood cells are one of the exceptions.
They have no nucleus but can still be very efficient.

Their size can change much more fluidly with the absence of lots of organelles.

Food

The food that we eat must be broken down into smaller molecules before the cell can obtain them for energy or building blocks for other molecules.

Cells use electron-transport chain for the third stage of transporting food and oxygen.

When the energy is release through the transfer, a drive is used as a process that produces ATP and consumes molecular oxygen.

Respiration

Plant Respiration=Photosynthesis

Animals cells give out carbon dioxide

Plant cells take in glucose and carbon dioxide

Plant cells give out oxygen

Animal cells take in oxygen and glucose

Reproduction

- Cells reproduce in Mitosis & Meiosis
- Mitosis is when cells reproduce asexually-they divide to make 2 cells
- Meiosis is when cells reproduce for the growth of a larger organism
- Cells divide to make more cells for growth and repair
- They replicate themselves by splitting the DNA

Organization

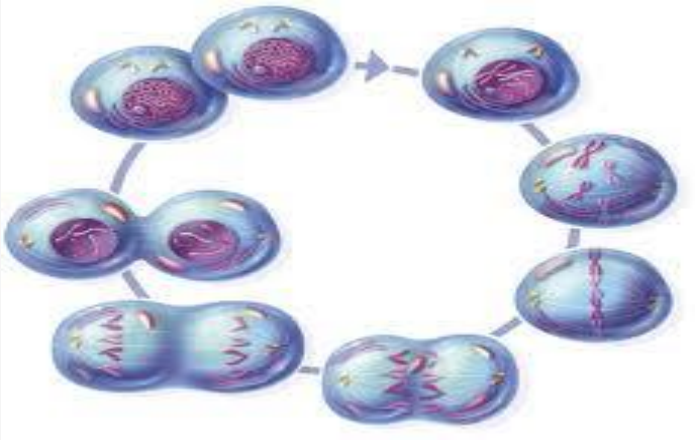
Cells are built out of membranes and organelles but are considered to be the main building blocks of living organisms. The following is a list (from smallest to largest) of the structure for most living organisms.

- Organelles
- Cells
- Tissues
- Single Organs
- Organ Systems
- Organisms

Growth

Cells reproduce asexually, using the process of Mitosis.

In Mitosis, a cell's nucleus divides itself in two, creating multiple pairs of chromosomes, and then forms two separate "child" cells.



Stimulus

Stimulus is a detectable change in the internal or external environment

When a stimulus is applied to a sensory receptor it normally elicits or influences a reflex via stimulus.

The sensory receptors receptors can receive information from outside the body.

As in touch receptors found in the skin or light receptors of the eye as well as from inside the body.

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