

Science Chapter 1 - Cell Structure and Function

Chapter 1, Lesson 1 Key Concepts

Two types of Microscopes; **Light Microscope** (Enlarges 1,500 times.), **Electron Microscope** (Enlarges 100,000 times)

6 Characteristics of Life; **Organization, Responses, Growth & Development, Reproduction, Homeostasis**

Chemistry of a Cell (There are four basic types of substances found in cells.); **1 Proteins** are folded chains of molecules <FUNCTION - necessary for nearly everything a cell does> **2 Nucleic Acids** are long chains of molecules, DNA <FUNCTION - contain the genetic information> **3 Lipids** are large molecules that do not dissolve in water <FUNCTION - store large amounts of chemical energy> **4 Carbohydrates** are made of one or more sugar molecules <FUNCTION - store energy>

Vocabulary Words

Lipid

large molecule that does not dissolve in water

light microscope

instrument that uses light and has one or more lenses that enlarge an image up to 1,500 times

protein

large molecule made of folded chains of amino acids

cell theory

states all organisms are made up of one or more cells, the cell is the basic unit of life, and all cells come from other cells

nucleic acid

long chain of molecules called nucleotides

homeostasis

keeping internal conditions within certain limits

carbohydrate

molecule made of one or more sugar molecules

Characteristics of Life

Responses, organization, homeostasis, reproduction, energy, growth & development

Basic Types of Substances Found in Cells

Proteins, nucleic acids, lipids, carbohydrates