

Quick Vocabulary

Lesson 1

carbohydrate one or more sugar molecules

cell theory living things are made of one or more cells; the cell is the smallest unit of life; new cells come from preexisting cells

lipid large macromolecule that does not dissolve in water

macromolecule substance that forms by joining many small molecules

nucleic acid macromolecule that forms when a long chain of nucleotides join together

protein long chain of amino acid molecules

theory explanation based on scientific knowledge resulting from several observations and experiments

Lesson 2

cell membrane protects the inside of a cell from the environment

cell wall stiff structure outside the cell membrane

chloroplast membrane-bound organelle that uses light energy and makes food

cytoplasm fluid inside a cell that contains salts and other molecules

cytoskeleton network of threadlike proteins inside a cell

envelope outer covering

function purpose for which something is used

nucleus directs all cell activities and contains DNA

organelle membrane-bound cell structure with a specialized function

Quick Vocabulary

Lesson 3

active transport movement of substances through a cell membrane using the cell's energy

diffusion movement from an area of higher concentration to an area of lower concentration

endocytosis process during which a cell takes in a substance by surrounding it with the cell membrane

exocytosis process during which a cell's vesicles release their contents outside the cell

facilitated diffusion when molecules pass through a cell membrane using transport proteins

osmosis diffusion of water molecules only through a membrane

passive transport movement of substances through a cell membrane without using energy

Lesson 4

cellular respiration series of chemical reactions that convert energy in food molecules into ATP

fermentation reaction used to obtain energy from food when oxygen levels are low

glycolysis process by which glucose is broken down

photosynthesis series of reactions that convert light energy, water, and CO₂ into glucose and give off oxygen