

Chapter 4

Vocabulary Words

Vocab - Day 1

- **Active Transport** -energy-requiring process in which transport proteins bind with particles and move them through the cell membrane.
- **Diffusion** - A type of passive transport in cells in which molecules move from areas where there are more of them to areas where there are fewer of them.
- **Endocytosis** - Process by which a cell takes in a substance by surrounding it with the cell membrane.
- **Enzyme** - A type of protein that regulates nearly all chemical reactions in cells.
- **Equilibrium** - Occurs when molecules of one substance are spread evenly throughout another substance.

Vocab - Day 2

- **Exocytosis** - Process by which vesicles release their contents outside the cell.
- **Fermentation** - Process by which oxygen-lacking cells and some one-celled organisms release small amounts of energy from glucose molecules and produce wastes such as alcohol, carbon dioxide, and lactic acid.
- **Inorganic Compound** - Compound, such as H₂O, that is made from elements other than carbon and whose atoms can usually be arranged in only one structure.
- **Metabolism** - The total of all chemical reactions in an organism.
- **Mixture** - A combination of substances in which the individual substances do not change or combine chemically but instead retain their own individual properties; can be gases, solids, liquids, or any combination of them.

Vocab - Day 3

- **Organic Compound** - Compounds that always contain hydrogen and carbon; carbohydrates, lipids, proteins, and nucleic acids are organic compounds found in living things.
- **Osmosis** - A type of passive transport that occurs when water diffuses through a cell membrane.
- **Passive Transport** - Movement of substances through a cell membrane without the use of cellular energy; includes diffusion, osmosis, and facilitated diffusion.
- **Photosynthesis** - Process by which plants and many other producers use light energy from the Sun to make sugars, which can be used as food.
- **Respiration** - Series of chemical reactions used to release energy stored in food molecules.

Vocab - Day 4

- **Matter** - Anything that has mass and takes up space; matter's properties are determined by the structure of its atoms and how they are joined.
- **Energy** - Ability to do work, usually expressed in joules.
- **Atom** - Tiny building blocks of matter, made up of protons, neutrons, and electrons.
- **Proton** - Positively-charged particle that is located in the nucleus of an atom.
- **Neutron** - Particle without an electrical charge that is located in the nucleus of an atom.
- **Electron** - Negatively-charged particles that move around the nucleus of an atom and form an electron cloud.

Vocab - Day 5

- **Element** - Substance that contains only one type of atom and cannot be broken down by normal chemical or physical means -- for example, oxygen, aluminum, and iron.
- **Compound** - Matter that is made of two or more elements and has physical and chemical properties different from each of the elements that make it up.
- **Molecules** - Group of atoms held together by covalent bonds; smallest example of a covalently bonded substance.
- **Ions** - Electrically-charged atom whose charge results from an atom losing or gaining electrons.
- **Turgor** - The stiffness of a plant due to the pressure of water; process by which a cell takes up water.

Vocab - Day 6

- **Plasmolysis** - The shrinking (or collapsing) of a cell due to the loss of water.
- **Producers** - Organism, such as a green plant or algae, that uses an outside source of energy like the Sun to create energy-rich food molecules.
- **Consumer** - Organism that cannot create energy-rich molecules, but obtain its food by eating other organisms.