**Unit 2 Vocabulary List**

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| **Prokaryote** | **A simple cell that does not have a true nucleus** **or membrane bound organelles** |
| **Eukaryote** | **Type of cell that has a true nucleus and** **membrane bound organelles** |
| **Unicellular** | **composed of only one cell** |
| **Multicellular** | **composed of more than one cell** |
| **DNA** | **Double stranded molecule that stores** **genetic information** |
| **RNA** | **Single stranded molecule that aids in** **protein synthesis** |
| **Stem Cell** | **Unprogrammed cells** |
| **Specialized Cell** | **Cell that has been programmed** **to do a specific job** |
| **Organelle** | **Specialized structures within the cell** |
| **Chromosomes** | **Condensed structures within the cell that** **carry genetic information** |
| **Chromatin** | **Thin, thread-like genetic material**  |
| **Gene** | **Functional segment of DNA that** **codes for a trait** |
| **Homeostasis** | **An organism’s regulation of its** **internal environment** |
| **Hydrophilic** | **“Love of water”** |
| **Hydrophobic** | **"Fear of water”** |
| **Permeability** | **The ability of substances to pass** **through a membrane** |
| **Exocytosis** | **Movement out of the cell** |
| **Endocytosis** | **Movement into the cell** |
| **Diffusion** | **Movement of particles from an area of** **high concentration to an area of low** **concentration until balanced** |
| **Buffers** | **A substance that keeps the pH of a solution** **from becoming too acidic or basic** |
| **Concentration Gradient** | **Uneven distribution of molecules** **between two regions** |
| **Osmosis** | **Diffusion of water across a semi-permeable membrane** |
| **Solute** | **The substance that is dissolved in a solution** |
| **Hypertonic** | **Having a higher solute concentration when compared to another solution** |
| **Hypotonic** | **Having a lower solute concentration when compared to another solution** |
| **Isotonic** | **Having the same solute concentration as another solution** |
| **Plasmids** | **Small circular pieces of DNA that can replicate themselves, usually in bacteria or protists** |
| **Chemotaxis** | **Movement of an organism in response to a chemical stimulus** |
| **Phototaxis** | **Movement of an organism in response to a light stimulus** |
| **Flagella** | **Long, whip-like structure used for movement** |
| **Cilia** | **Short, hair-like structures used for movement** |
| **Pseudopod** | **“False-foot”; extension of the cytoplasm used for movement and feeding** |
| **Active Transport** | **Movement of substances into or out of** **the cell that does require** **the use of energy** |
| **Passive Transport** | **Movement of substances into or out of** **the cell that does NOT require** **the use of energy** |
| **Facilitated Diffusion** | **“Helped Diffusion” of large molecules** **into or out of the cell.** |