### Biology Notes

**Cell**  
: The basic structural, functional, and biological unit of all living organisms.

**Mitochondria**  
: The powerhouse of the cell; an organelle that produces energy (ATP) through cellular respiration.

**Nucleus**  
: The control center of the cell that contains DNA and regulates gene expression.

**Ribosome**  
: A molecular machine that synthesizes proteins by translating mRNA.

**Photosynthesis**  
: The process by which green plants and some other organisms use sunlight to synthesize foods from carbon dioxide and water.

**Osmosis**  
: The diffusion of water across a semi-permeable membrane from an area of low solute concentration to high solute concentration.

**Enzyme**  
: A protein that acts as a biological catalyst to speed up chemical reactions in living organisms.

**Homeostasis**  
: The ability of an organism to maintain a stable internal environment despite external changes.

**DNA (Deoxyribonucleic Acid)**  
: The molecule that carries genetic information in living organisms and is passed from parent to offspring.

**Chloroplast**  
: An organelle found in plant cells where photosynthesis takes place.