

# **Science Notes for Testing RAG**

## **Photosynthesis**

Photosynthesis is the process by which green plants use sunlight to synthesize foods from carbon dioxide and water. It involves chlorophyll and produces oxygen as a by-product.

## **Newton's Laws**

Newton's First Law states that an object will remain at rest or in uniform motion unless acted upon by a force. The Second Law states that Force equals mass times acceleration ( $F=ma$ ). The Third Law states that every action has an equal and opposite reaction.

## **Cell Structure**

Cells are the basic unit of life. They have various organelles such as the nucleus, mitochondria, ribosomes, and endoplasmic reticulum.

## **Water Cycle**

The water cycle describes the continuous movement of water on, above, and below the surface of the Earth. It includes evaporation, condensation, precipitation, and collection.

## **Acids and Bases**

Acids are substances that release hydrogen ions ( $H^+$ ) in solution, while bases release hydroxide ions ( $OH^-$ ). The pH scale measures the acidity or alkalinity of a solution.