2.17 Photosynthesis

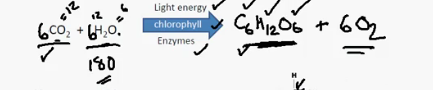
*Describe the process of Photosynthesis and understand its importance in conversation of light energy to chemical energy*

* The source of Light energy is the sun. Light travels in the form of photoms (package of light energy) captured by the leaf
* The chemical energy will take the form of bonds, carbon, hydrogen and oxygen.
* Bonds are formed by sharing of electrons, which needs energy
* We require carbon, hydrogen and oxygen this is supplied to the plants form the form of water by the roots system, which is transpired up the stem and to the leaf
* Water molecules, comes out of the xylem which makes it up the palisade area
* Palisade cell contains many chloroplasts; it is organelles within the cells.
* Chlorophyll traps light which carries out the conversation of chemical energy

2.18 Photosynthesis Equations

*Recall the word equation and the balanced chemical symbol equation for photosynthesis*

* 
* Word equation

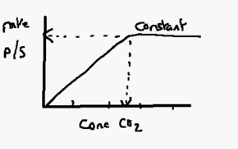


* Balanced chemical symbol equation

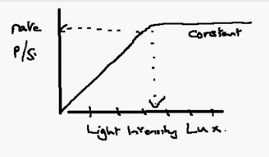
2.19 Factors affecting the rate of photosynthesis

*Understand how carbon dioxide concentration, light intensity and temperature affect the rate of photosynthesis*

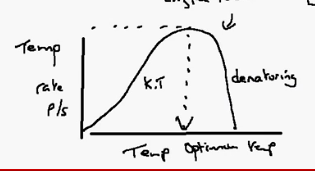
* Rate= how fast photosynthesis is occurring. WE measure this by how the glucose and oxygen is produced.
* Carbon dioxide: increasing the concentration of carbon dioxide.



* Light Intensity: Repeat at different light intensities



* Temperature: (REFER TO ENZYMES REACTIONS) the substrate molecules collide with enzymes at higher rate and product is formed more quickly and faster a particular temperature it denatures



* The slowest rate dictates the lowest rate. This is called the limiting factor