

Biology

Photosynthesis

- Photosynthesis is a process by which all green plants make their own food (glucose) using carbon dioxide, water light and chlorophyll. Oxygen is produced as a by product.
-
-
-
-
-
- Photosynthesis mostly takes place on the leaves of all green plants (chlorophyll makes the plant green, so photosynthesis takes place wherever there is chlorophyll)
- USES OG GLUCOSE:
 - 1) glucose is used in respiration to produce energy
 - 2) glucose is converted into cellulose to make cell walls
 - 3) glucose is converted into fats and stored in seeds
 - 4) glucose combines with nitrogen to make amino acids which form proteins (needed for growth)
 - 5) glucose is converted into starch for storage because starch is insoluble so doesn't affect water movement in the cell
 - 6) glucose is converted into sucrose and stored in fruits
- MINERALS:
 - Nitrogen: making proteins for growth.
Nitrogen deficient plants have poor growth and weak stems
 - Phosphorus: respiration and making roots (DNA and cell membranes)
Phosphorus deficient plants will have purple leaves and small roots
 - Potassium: respiration and photosynthesis
Potassium deficient plants will have poor flower and fruit growth and leaves will be yellow with dead spots