

Photosynthesis Notes

- Plants make food using the process called photosynthesis
- Everything in the world is made of atoms which make up cells
 - Atoms -> Molecules -> Organelles -> Cells
 - Atoms are made of protons, neutrons and electrons
- Plants are autotrophs- they can make their own food
 - Plants use **glucose** as their food
 - Glucose is made of 6 atoms of Carbon, 12 atoms of Hydrogen and 6 atoms of Oxygen
 - The formula for glucose is C₆H₁₂O₆
- Energy comes from the sun in particles called **photons**
 - Chloroplasts are filled with a pigment called **Chlorophyll**
 - Pigments are chemicals that absorb and reflect light
 - Chlorophyll is what makes plants green
 - The chlorophyll traps the energy from the photons and the cell uses that energy to make glucose
- Photosynthesis
 - Plants take in Carbon Dioxide (CO₂) from the air
 - Plants take in Water (H₂O) from the ground
 - These are moved into the chloroplasts
 - The energy from the sun is used to take apart the H₂O and CO₂ into individual atoms
 - The atoms are put back together to make glucose (C₆H₁₂O₆) and oxygen (O₂)
- Scientists write the process as a chemical equation:

