Foundations in Biology

Carbohydrates = carbon, hydrogen and oxygen

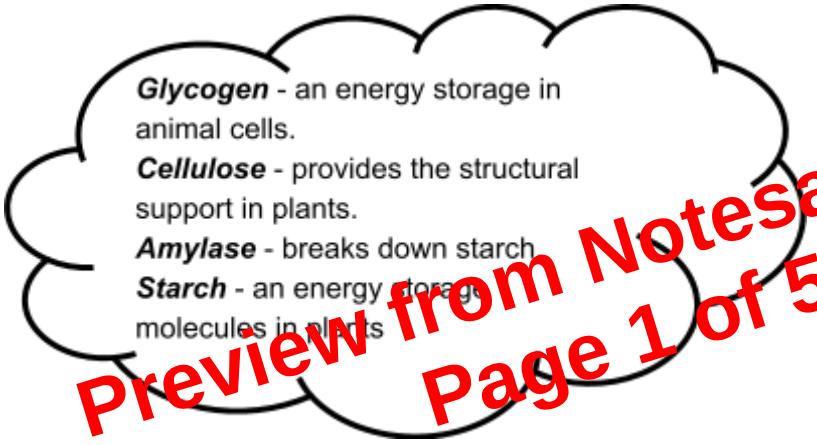
- Polysaccharides are complex carbohydrates consisting of multiple sugar units linked together.
- They can be classified into three main types: monosaccharides, disaccharides, and polysaccharides.

Monosaccharides - 'one sugar' / 'simple sugars'

- Sources of energy

Polysaccharides - large molecules formed from many monosaccharides.

- 'Many sugars' - starch - energy storage molecules (in plants).



Disaccharides - 'double sugars' formed when two monosaccharide molecules join together with a glycosidic bond.

There are three main sugars: Glucose, Galactose and Fructose

- Hexose sugars which are six sugars.

Glucose + oxygen ➡ cardon dioxide + water + energy (ATP)

★ Glucose can be quickly broken down in cells in respiration to produce ATP / release energy.

Fructose: sugar found in fruits and nectar.
Galactose: used in making glycolipids / glycoproteins.