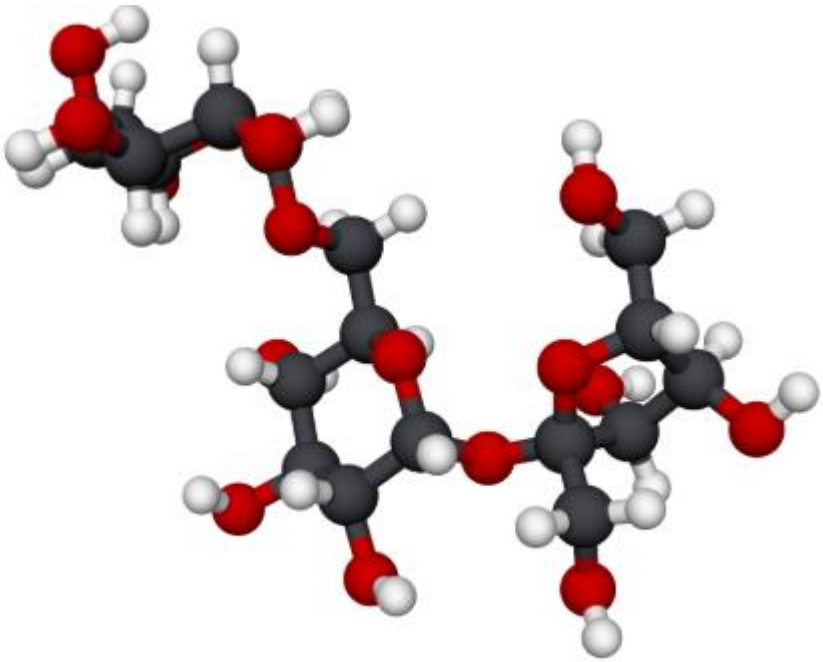
Explaining the relationship between the structure and function of sucrose

Introduction:



Sucrose is a disaccharide which is formed from two monosaccharides joined together by a process called Condensation. Two hydroxyls (-OH) groups line up alongside each other.One combines with a hydrogen atom from the other to form a water molecule, thus the term Condensation reaction, This allows an 'oxygen bridge' to form between the two molecules resulting in a disaccharide which means ' two sugar units'.Sucrose results from the union of glucose and fructose and it is the main form in which carbohydrate produced in photosynthesis is transported in plants.Sucrose is a relatively stable compound and is, therefore, best suited for the role of translocation in the phloem of plants to the various storage organs.It is particularly abundant in the stem of the sugar cane and the root of sugar beet.

https://www.slideshare.net/dgreene44/sucrose-24593193?ref=https://notesmaster.com/en/group/caribbean/1556-cape-covid19-support/28134-explaining-the-relationship-between-the-structure-and-function-of-sucrose

Test your Mastery:

1. Define the terms 'Source' and 'Sink' in relation to the process of Translocation.

2. Give TWO reasons why sucrose is best-suited for is role in translocation.

3.With the aid of a simple diagram e.xplain the mechanism of the Mass Flow Hypothesis