

Bonds	Location
* Polar covalent bond	Intramolecular bond between H and O in the water molecule
<p>* Hydrogen bonds:</p> <p>attraction between hydrogen and electronegative atoms</p>	<ol style="list-style-type: none"> 1. Intermolecular bond between H and O in different molecules 2. Between water molecules and the cell walls of conducting cells in plants 3. Hydrogen bonds between parallel cellulose molecules "Some hydroxyl groups in its glucose monomers are free to hydrogen-bond with the hydroxyls of other cellulose molecules lying parallel to it" 4. In the polypeptide backbone, between oxygen atoms and Hydrogen atoms attached to Nitrogen. 5. Alpha helix "between every fourth amino acid. 6. β-pleated sheets "Hydrogen bonds between parts of the two parallel segments of polypeptide backbone" 7. Between Hydrogen and electronegative atom in the tertiary structure 8. Stabilize double helix of DNA. A+T \Rightarrow 2 Hydrogen bonds / G+C \Rightarrow 3 hydrogen bonds

Bonds	Location
* Glycosidic linkage	Monosaccharide + Monosaccharide ^{"In disaccharides and Polysaccharides"}
* 1-4 Glycosidic linkage	Maltose "between Glucose + Glucose"
* 1-2 Glycosidic linkage	Sucrose "between Glucose and Fructose"
* α 1-4 Glycosidic linkage	Starch
* 1-6 Glycosidic linkage	Amylopectin at the branch points
* β Glycosidic linkage	Cellulose
* Ester linkage	Fats "between a hydroxyl group "from glycerol" and a carboxyl group "from the fatty acid"
* Hydrophobic Interactions and van der Waals	Between the side chain of hydrophobic amino acids in the core of the protein
* Ionic bonds	Between positively and negatively charged side chains
* Disulfide bridges "covalent"	two cysteine monomers which have sulfhydryl groups (SH) on their side chains are brought close together by the folding of the protein
* Peptide bond	Between amino acids

Bonds

Location.

* Hydrophobic bonds

1. Between sickle-cell hemoglobin proteins
2. Plasma membrane

* Phosphodiester linkage

Between adjacent nucleotides within DNA strand
"Consists of a phosphate group that links the sugars of two nucleotides"

* Covalent bond

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Glycoprotein