

AP Biology Topic 1.3 – Introduction to Biological Molecules

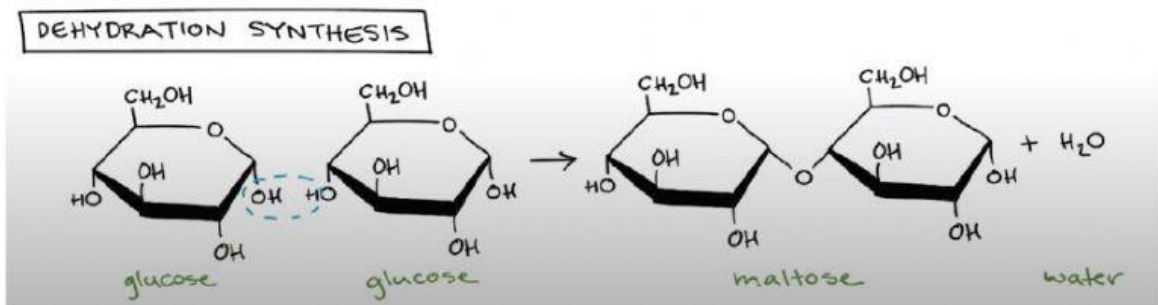
- Macromolecules are _____, constructed by the _____ bonding of smaller molecules called _____

Structure of Monomers and Polymers – Use the letter ‘O’ to make the structures below

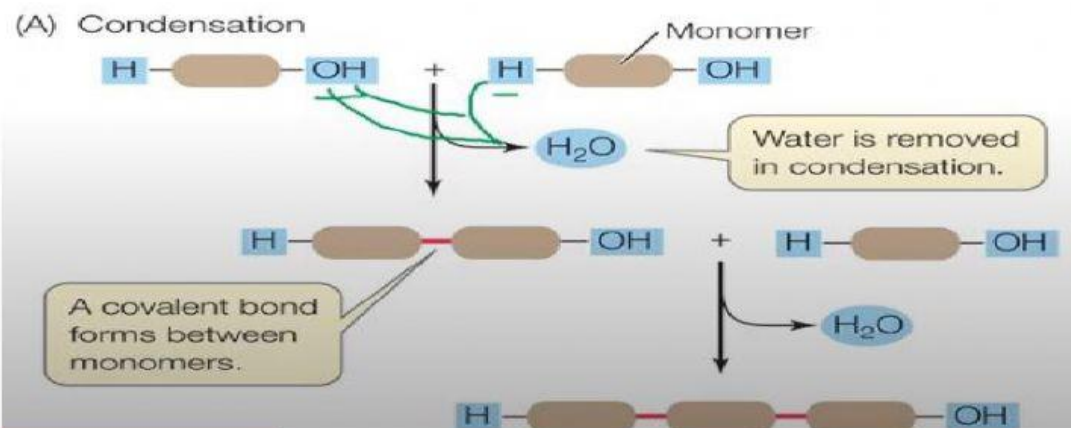
Monomer draw picture in space below: a _____ is a small molecule

Polymer draw picture in space below: a _____ is a long-chain molecule made up of a repeated pattern of _____

- Polymers are formed through _____ reactions.
- Dehydration synthesis means “_____”
- It is also considered to be a _____ since two molecules are condensed into one larger molecule with the loss of a smaller molecule (_____)

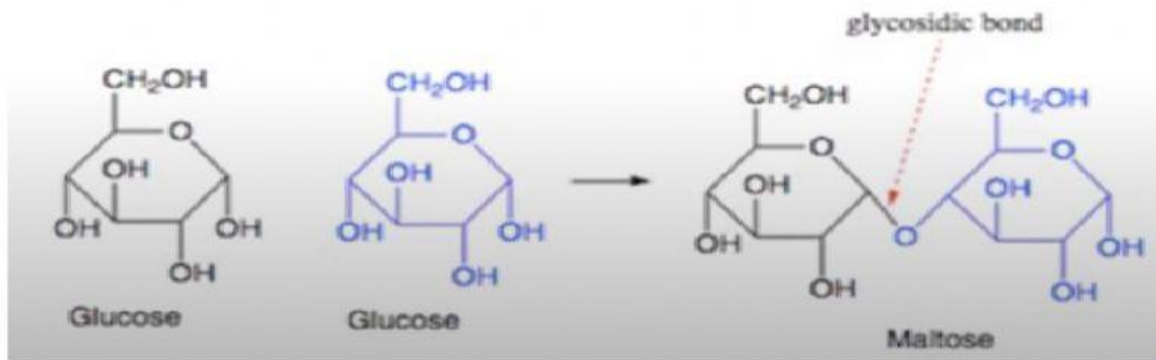


- In a dehydration synthesis reaction, the _____ of one monomer combines with the _____ group of another _____, releasing a molecule of _____.
- The monomers share _____ and form _____.
- As additional monomers join, this chain of repeating _____

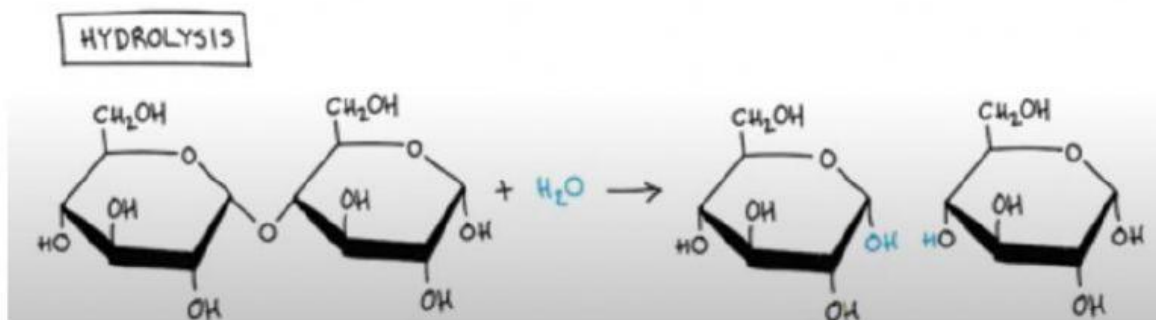


- Different types of _____ are formed during _____ synthesis in different macromolecules:

Carbohydrate	Lipid	Protein	Nucleic Acid



- Polymers are broken down through _____ reactions.
- Hydrolysis means “ _____ ”
- During these reactions, the _____ is broken into two components: one part gains a _____ and the other gains a _____ water molecule.



- What is the first thing that happens during hydrolysis?
- What does this do to a covalent bond?
- Identify and explain the process we use to build monomers.

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