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Topic: Polymerization Worksheet

Summary: Students will be introduced to polymerization by filling out a worksheet with basic information.

Goals & Objectives: Students will be able to define and explain the basics how monomers are used to build polymers.

Time Length: 20 minutes

NGSS Standards: HS-LS1-6. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.

Materials:

Textbook, class notes, and pencil or pen

Procedures:

Hand out this worksheet as an introduction to relationship between monomers and polymers.

Accommodations:

Students with an IEP may work with a partner filling in the definitions.

Polymerization WS

(Write definitions or explanations)

1. What is a monomer? _____

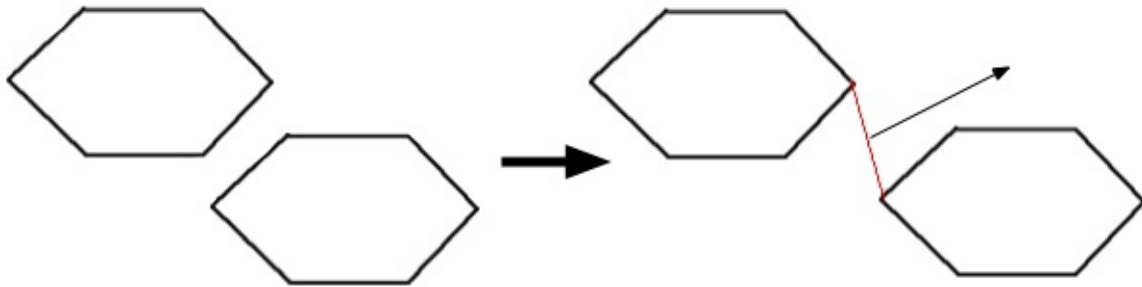
2. What is a polymer? _____

3. What does organic chemistry mean? _____

4. List the four biomolecules (macromolecules). _____

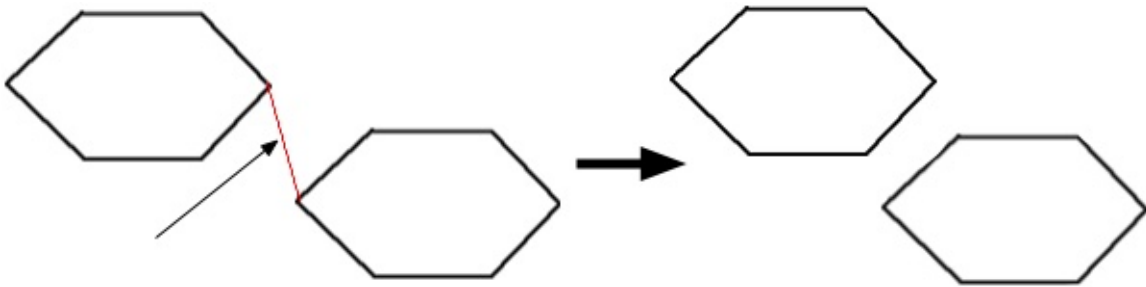
5. What is dehydration synthesis? _____

6. Label the model of dehydration synthesis. (monomer, polymer, H₂O)



7. What is hydrolysis? _____

8. Label the model of hydrolysis. (monomer, polymer, H₂O)



9. How are monomers and polymers related? _____