

Final Exam Study Guide Unit 3: Macromolecules

1. What are the monomers that bond together to form the polymers listed?

Polymer (Macromolecule)	Monomer (Building Block)
Carbohydrate	
Proteins	
Nucleic Acids	
Lipids	

2. Circle or highlight the correct word for each bolded pair: Dehydration synthesis **adds / loses** a molecule water to **break / form** a bond, while hydrolysis **adds / loses** a molecule of water to **break / form** a bond.

3. What are the names of each carbohydrate:

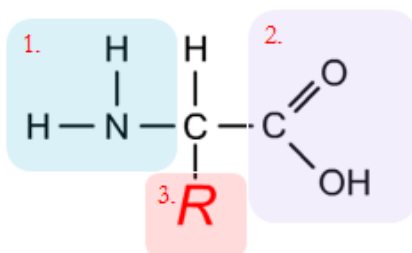
- 1 sugar: _____ ex: _____
- 2 sugars: _____ ex: _____
- Many sugars: _____ ex: _____

4. _____ are macromolecules that are mainly nonpolar and do not mix with water.

5. What are the 4 types of lipids?

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6. Label the parts of an amino acid and circle or highlight the part of the amino acid that makes each amino acid different.

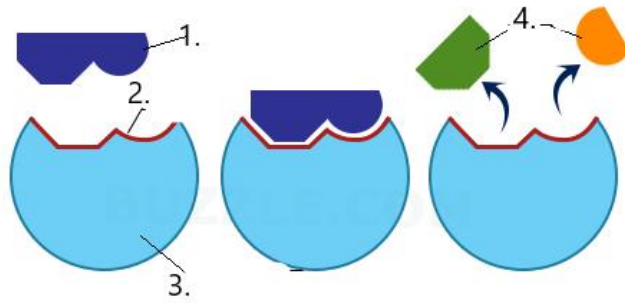


- _____
- _____
- _____

7. What macromolecule are enzymes?

8. Enzymes _____ _____ chemical reactions without being used up or changed during the reaction.

9. Label the parts of the enzyme:



1. _____
2. _____
3. _____
4. _____

10. The amylase enzyme can only break down starch and not proteins. Why?

11. Enzymes work by lowering the _____ of a reaction.

12. What conditions in an environment can affect enzyme activity?

13. If an enzyme loses its shape due to conditions outside the optimum level, what happens to the reaction?

14. DNA and RNA are examples of _____ macromolecules, which contain our genetic information.