

# Macromolecules

## Exit Quiz – Teacher Edition

### I. Multiple Choice – Select the best answer

1. The formation of polymers from monomers occurs through a process known as \_\_\_\_\_.
  - a) hydrolysis
  - b) denaturation
  - c) hydration reaction
  - d) dehydration synthesis
2. How are carbohydrates used in the body?
  - a) Quick energy
  - b) Movement
  - c) Stores genetic information
  - d) Speeds up reactions
3. Which of the following is a characteristic of lipids?
  - a) They are composed of nitrogenous chains.
  - b) They are polar molecules.
  - c) They are made of amino acids
  - d) They are not soluble in water.
4. Which of the following bonds are formed between amino acids?
  - a) Glycosidic linkages
  - b) Hydrogen bonds
  - c) Ester linkage
  - d) Peptide bonds
5. Which of the following macromolecules contains C, H, O, N and P?
  - a) Amino acids
  - b) Hormones
  - c) Nucleic acids
  - d) Carbohydrates

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## II. Match each description with the correct macromolecules

| Macromolecule  | Description   |
|--|---|
| 1. Lipid<br>2. Nucleic acid<br>3. Protein<br>4. Carbohydrate | A. Steroids and cholesterol molecules.<br>B. It helps to provide shape to the plant cell.<br>C. Contains genetic information.<br>D. Speeds up and slows down biochemical reactions. |

## III. List four functions of proteins in living organisms.

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## IV. What are the structural differences between a saturated and an unsaturated fatty acid?

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## Answers

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## II. Match each description with the correct macromolecules

| Macromolecule       | Description  |
|---------------------|--|
| 1. Lipid (A)        | A. Steroids and cholesterol molecules.             |
| 2. Nucleic acid (C) | B. It helps to provide shape to the plant cell.    |
| 3. Protein (D)      | C. Contain genetic information.                    |
| 4. Carbohydrate (B) | D. Speeds up and slows down biochemical reactions. |

## V. List four functions of proteins in living organisms.

List any four functions from the following

1. Contraction of muscle tissue
2. Transportation of oxygen in the bloodstream
3. Providing immunity
4. Regulating other proteins
5. Carrying out chemical reactions.

## III. What are the structural differences between a saturated and an unsaturated fatty acid?

Unsaturated fatty acids have a double bond between at least two carbons while in the saturated fatty acids, the carbon atoms in the chain is bonded to other carbons by single bonds.