

Macromolecules Worksheet

1. What are the four main macromolecules?

2. Which type of macromolecule provides immediate energy and stores energy on a short-term basis?

3. Which type of macromolecule controls the cell activities by directing protein synthesis?

4. What kind of bond holds amino acids together?

5. How can a chain of amino acids turn into a protein?

6. What is the monomer of a nucleic acid called?

7. What two functions do nucleic acid have?

a. _____

b. _____

8. What are the three parts that make up a nucleotide?

a. _____ b. _____ c. _____

9. What kind of bond holds the two double helix strands together?

10. Draw the general chemical structure of an amino acid.

Macromolecules Worksheet

Answers

1. What are the four main macromolecules?
carbohydrate, lipid, protein, and nucleic acid
2. Which type of macromolecule provides immediate energy and stores energy on a short-term basis?
carbohydrate (glucose)
3. Which type of macromolecule controls the cell activities by directing protein synthesis?
protein and nucleic acid
4. What kind of bond holds amino acids together?
peptide bond
5. How can a chain of amino acids turn into a protein?
A chain of amino acids turning into a protein involves transcription, mRNA processing, translation, RNA and amino acid attachment, polypeptide folding, post-translational modifications, and protein transport and targeting.
6. What is the monomer of a nucleic acid called?
nucleotides
7. What two functions do nucleic acid have?
 - a. Store genetic information
 - b. Transmit inherent characters from one generation to the next
8. What are the three parts that make up a nucleotide?
 - a. Nitrogenous base
 - b. 5 carbon sugar
 - c. Phosphate group
9. What kind of bond holds the two double helix strands together?
Hydrogen
10. Draw the general chemical structure of an amino acid.

