

Topic: Monomer Polymer Worksheet

Summary: Students answer introductory questions about the monomers and polymers of the four macromolecules.

Goals & Objectives: Students will be able to remember the four macromolecules. Students will be able to remember how each monomer and polymer pair.

Standards: CA 1h Students know that most macromolecules (polysaccharides, nucleic acids, proteins, lipids) in cells and organisms are synthesized from a small collection of simple precursors.

Time Length: 60 minutes

Materials:

- Class textbook
- Photocopied worksheets
- Pencils or pens

Procedures:

1. Tell the students which section they are to use in the textbook. Students are then going to read the section and answer the questions on the worksheet.

Accommodations: Students who cannot read at a high school level can be shown pictures in the book that help explain the answer. Give these students less problems to complete, but they need to answer the questions about each macromolecule. Students with an IEP can take the handout home if they need extra time.

Evaluation:

Question 1 and 2 are worth 2 points each. Questions 3-8 are worth 1 point each. The assignment is worth a total of 10 points.

Macromolecule Worksheet

1. Explain how monomers are related to polymers.

2. When polymers are broken down into monomers, what would your body do with those monomers?

3. Draw a line to match the **monomer** on the left to the **macromolecule** on the right.

Fatty acids and glycerol	protein
Monosaccharide	lipid
Nucleotide	nucleic acid
Amino acid	carbohydrate

4. Draw a line to match the **polymer** on the left to the **macromolecule** on the right.

DNA	protein
Enzyme	lipid
Triglyceride	nucleic acid
Polysaccharide	carbohydrate

5. Draw a line to match the **monomer** on the left to the **polymer** on the right.

Fatty acids and glycerol	polysaccharide
Monosaccharide	RNA
Nucleotide	enzyme
Amino acid	phospholipid

6. Draw a line to match the **monomer** on the left to the **polymer** on the right.

Fatty acids and glycerol	enzyme
Glucose	triglyceride
Nucleotide	starch
Amino acid	DNA

7. Draw a line to match the **monomer** on the left to the **polymer** on the right.

Amino acid	glycogen
Nucleotide	phospholipid
Monosaccharide	protein collagen
Fatty acids and glycerol	DNA

8. Draw a line to match the **polymer** on the left to the **macromolecule** on the right.

Cholesterol	protein
Enzyme	nucleic acid
RNA	carbohydrate
Cellulose	lipid