

Carbohydrate Questions

- 1) What are monomers and how do they relate to polymers?
- 2) What is the function of carbohydrates in animals, plants, and insects?
- 3) Why is glucose an important macromolecule for mammals?
- 4) What is the structure of glucose and fructose?
- 5) What are polysaccharides? Where are the following polysaccharides found? What is their function?
Glycogen, cellulose, starch, chitin
- 6) Compare and contrast good sources of carbohydrates and bad sources of carbohydrates for an average, moderately active human attempting to remain healthy

Lipids Questions

- 1) What is the function of lipids?
- 2) Describe the structure of a triglyceride and explain how they are formed.
- 3) Why are saturated fats more unhealthy than unsaturated and polyunsaturated fats?
- 4) What is the function of phospholipids? What is their structure?
- 5) What is the function of steroids?

Protein Review Questions

- 1) Why is protein an important macromolecule? Provide examples.
- 2) What are amino acids? What is their structure?
- 3) Describe the following levels of protein structure:
 - Primary structure:
 - Secondary structure:
 - Tertiary structure:
 - Quaternary structure:
- 4) Why is the primary structure of a protein important to its function? Explain briefly but completely.

Enzyme Questions

- 1) Why is each enzyme a catalyst for only a single specific chemical reaction?
- 2) How do enzymes work and what do they do?
- 3) How can you increase or decrease the reaction rate of enzymes? **Why** do these methods work?
- 4) Why is it dangerous to have a high fever? ***Briefly explain completely.***