

Lesson 49: Polymers II - Natural Polymers

text: 968-981

what to know:

- importance of natural polymers, §25-2
- what amino acids are, §25-2
- concept of chiral centers, §25-2
- structure, classification and function of proteins, §25-2
- structure and function of carbohydrates and nucleic acids, §25-2

questions:

1. What is the difference between D- and L-alanine?
2. Determine the number of chiral centers in the structure of cholesterol (page 954).
3. How many different tripeptides can be formed using only three different amino acids?
4. Why would you expect many proteins to be water soluble?
5. What role does the disulfide bridge play in protein structure?
6. How do enzymes work?
7. How many chiral centers in α -D-glucose?
8. How do cellulose and starch differ?
9. Exactly what information is encoded on DNA?
10. What is the genetic code?
11. What is the difference between globular and fibrous proteins?