Chapter 3
The Molecules of Cells

1. Characteristics of carbon that contribute to its ability to form an immense diversity of organic molecules include its
   a. tendency to form covalent bonds.
   b. ability to bond with up to four other atoms.
   c. capacity to form single and double bonds.
   d. ability to bond together to form extensive, branched, or unbranched “carbon sketetons.”
   e. All of the choices are correct.

2. A hydroxyl group is
   a. also called a carboxyl group.
   b. characteristic of proteins.
   c. hydrophobic.
   d. characteristic of alcohols.
   e. None of the choices are correct.

3. The results of dehydration synthesis can be reversed by
   a. a condensation reaction.
   b. a hydrolysis reaction.
   c. digestion.
   d. polymerization.
   e. a hydrolysis reaction and digestion.

4. The storage form of carbohydrates in animals is ________________ and in plants is ________________.
   a. starch …. glycogen
   b. glycogen …. glycogen
   c. cellulose … glycogen
   d. glycogen … cellulose
   e. sucrose … glycogen

5. A triglyceride
   a. consists of three fatty acids attached to a glycerol.
   b. is hydrophobic.
   c. plays a role in energy storage.
   d. is a type of fat.
   e. All of the choices are correct.