Chemistry Level I : Mid-term II
(Chapters 6-10)

1. List three different mixtures and a few of the items that each contain (e.g. cake: eggs, milk, flour). *Examples will vary.*

   a. *juice: water, sugar, grape flavoring*

   b. *mud: sand and water*

   c. *chocolate: sugar, cocoa, milk*

2. Define the following in your own words.

   a. homogeneous mixture
   a mixture of the same kind like salt water.

   b. heterogeneous mixture
   a mixture of a different kind like ice water.

   a. What does the Greek word *homos* mean? *same*

   b. What does the Greek word *genos* mean? *kind*

   c. What does the Greek word *heteros* mean? *other*

3. This three ways to separate mixtures.

filtration

evaporation

chromatography

4. In your own words, describe the technique called chromatography.

Chromatography means "to write with color." Paper chromatography uses paper to separate different molecules based on how they move up a piece of paper. Some molecules will migrate faster than other molecules.

5. In your own words define *carbohydrate* and give an example.

A carbohydrate is a molecule made of carbon and water.

6. What is a saccharide and explain the difference between a monosaccharide, an oligosaccharide, and a polysaccharide.

A saccharide is another name for the simplest carbohydrates called sugars. Mono- is one sugar, oligo- is a few sugars, and poly- is many sugars.

7. Give several examples of objects that you know which are made of polymers.

football , plastic wrap, cotton clothing, styrofoam cups etc.

8. What happens to natural rubber when it is heated with sulfur?

Natural rubber is sticky before it is heated with sulfur and hardens when heat and sulfur are added. The polymers become cross-linked.

9. Give the name of two biological polymers.

protein and DNA

10. What is the name of the repeating units that make up protein? DNA?

The repeating units that make up protein are called amino acids.

The repeating units that make up DNA are called nucleotides.