Week 4 Worksheet

Chapter 3:

1. Identify the functional groups in the following molecule. Note the classification (primary, etc.) where appropriate.
2. Circle which compound has the higher:

**Boiling point**

a)

b)

c)

**Melting point**

a)

b)
3. Determine if the following solutes are miscible or immiscible in hexane.

4. Which of the following molecules can hydrogen bond to another molecule like itself? Which of the following molecules can hydrogen bond to water?
5. Label the nucleophilic and electrophilic sites in the molecule below.

![Molecule Image]

Chapter 4:

6. Draw all possible constitutional isomers for $C_6H_{14}$.

7. Give the IUPAC name for the following alkanes.

a) 

![Alkane Image]
b)