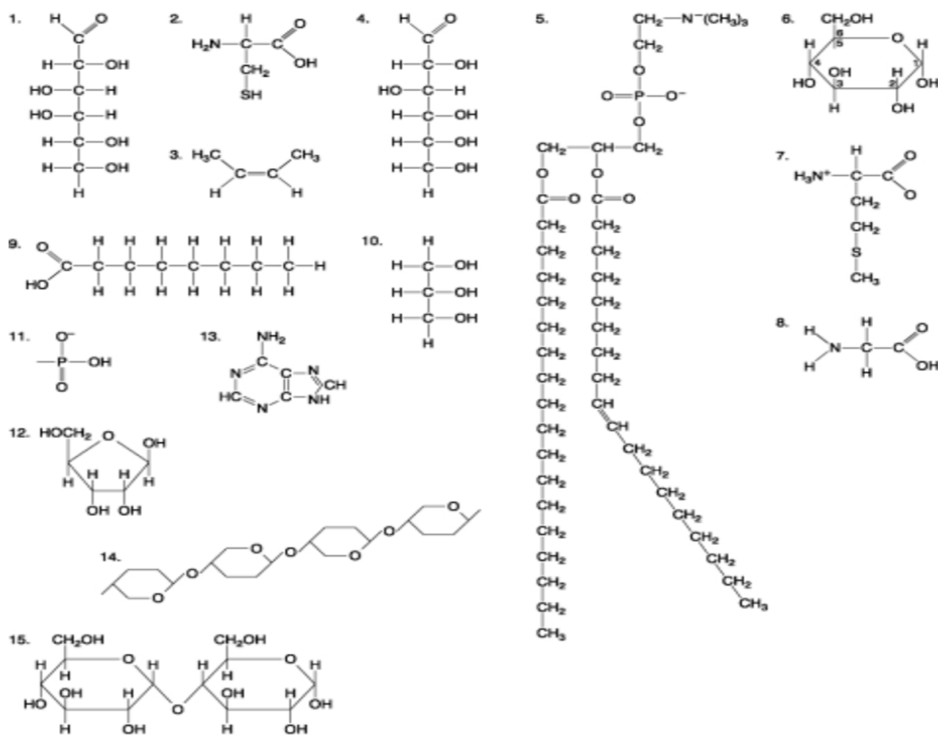


## Macromolecule Worksheet (Ch. 5)

The following questions are based on the 15 molecules illustrated in Figure 5.8. Each molecule may be used once, more than once, or not at all.



**Figure 5.8**

- 1) Which of the following molecules are structural isomers?  
 A) 1 and 4  
 B) 5 and 14  
 C) 6 and 12  
 D) 12 and 13  
 E) 14 and 15

### 1. Begin with a review of General Chem Review

- a. Molecular geometry (tetrahedral, trigonal planar, linear)
  1. borane, methane, ammonia, water,  $\text{HF}$ ,  $\text{CO}_2$
  2. how to draw using wedge & dash
- b. Lewis Acids & Bases
  1. Curved arrow notation (bond making/breaking)
    1.  $\text{F}_2 + \text{BF}_3 \rightarrow \text{BF}_4^-$  (new covalent bond)
    2.  $\text{Li} + \text{Cl}^- \rightarrow \text{Li}^+\text{Cl}^-$  (new ionic bond (a salt))