

You should be able to identify each of the following functional groups within organic molecules:

**amino** group within an **amine** molecule (both the form found at low pH and high pH)

**carbonyl** group within an **aldehyde** molecule (you need to know it is within an aldehyde vs a ketone)

**carbonyl** group within a **ketone** molecule (you need to know it is within a ketone vs an aldehyde)

**carboxyl** group within a **carboxylic acid** (both the form found at low pH and high pH)

**ester** group within an **ester** molecule

**hydroxyl** group within an **alcohol** molecule

**phosphate** group within a **phosphate** molecule

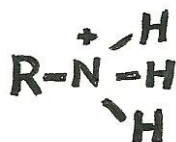
**sulfhydryl** group within a **thiol** molecule



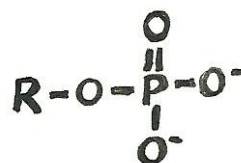
\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_