Functional Groups

The **functional group** is one of the unifying concepts in organic chemistry. Each functional group has its own chemical behavior that is similar – or even identical – across a wide range of organic molecules, and is not greatly affected by other structural elements in the same molecule.

Each functional group has its own structure that defines it as a functional group. You should be able to tell one functional group from another. Note that sometimes one or more functional groups will appear as substructures of another functional group, but you should not allow yourself to be confused by this: even though the carbonyl group (the ketone/aldehyde group) and the OH ("alcohol") group are both present in the carboxylic acid functional group, it is **never** correct to identify "COOH" as a "hydroxy ketone."

Using the table of functional groups on the inside back cover of your textbook, identify the functional groups in each of the structures shown below. Be sure to identify entire functional groups, not just parts of them! The first has been done for you as an example.

Functional Groups

The **functional group** is one of the unifying concepts in organic chemistry. Each functional group has its own chemical behavior that is similar – or even identical – across a wide range of organic molecules, and is not greatly affected by other structural elements in the same molecule.

Each functional group has its own structure that defines it as a functional group. You should be able to tell one functional group from another. Note that sometimes one or more functional groups will appear as substructures of another functional group, but you should not allow yourself to be confused by this: even though the carbonyl group (the ketone/aldehyde group) and the OH ("alcohol") group are both present in the carboxylic acid functional group, it is **never** correct to identify "COOH" as a "hydroxy ketone."

Using the table of functional groups on the inside back cover of your textbook, identify the functional groups in each of the structures shown below. Be sure to identify entire functional groups, not just parts of them! The first has been done for you as an example.