### **CONCEPT:** FUNCTIONAL GROUPS IN CHEMISTRY

• Functional Group: the part of a molecule that is recognizable and responsible for a compound's \_\_\_\_\_\_

#### **Hydrocarbons**

• Compounds containing only carbons and hydrogens.

**EXAMPLE:** Identify the type of functional group(s) present within the following compound.

$$H_2C$$
— $CH_2$   $C$   $CH$ 
 $HC$ 
 $CH$ 
 $HC$ 
 $CH_2$ 
 $CH_2$ 
 $CH_2$ 
 $CH_2$ 

## **Functional Groups without Carbonyls**

- Carbonyl Group: represents a carbon doubled bonded to an oxygen: \_\_\_\_\_\_.
  - □ Functional groups w/o a carbonyl group are recognizable by the presence of a \_\_\_\_\_, \_\_\_\_ or \_\_\_\_\_

**EXAMPLE:** Identify the type of functional group(s) present within the following compound.

### **CONCEPT:** FUNCTIONAL GROUPS IN CHEMISTRY

# **Functional Groups with Carbonyls**

• These types of functional groups share some structural similarities with those without carbonyls.

**EXAMPLE:** Identify the type of functional group(s) present within the following compound.

**PRACTICE:** Identify the type of functional group(s) present within the following compound.

$$CH_3CH=CHCH_2$$
 $CH_3CH=CHCH_2$ 
 $CH_3$ 
 $CH_3$ 

**PRACTICE:** Identify the type of functional group(s) present within the following compound.