

Honors Chemistry  
**Worksheet 11-1**  
**Organic Compounds**

Name \_\_\_\_\_

Period \_\_\_\_\_

1. What is the general molecular formula for alkanes? \_\_\_\_\_
2. Define chained alkanes.
3. Define branched alkanes.
4. What does the prefix cyclo indicate with alkanes?
5. What is the general molecular formula for cycloalkanes? \_\_\_\_\_

***Draw the structural formulas and write their molecular formulas. Use the molecular model kits to assemble the models of the following hydrocarbons, if needed.***

**6. CHAINED ALKANES**

methane MF \_\_\_\_\_ propane MF \_\_\_\_\_ octane MF \_\_\_\_\_

**7. BRANCHED ALKANES**

2-methyl pentane MF \_\_\_\_\_ 3-ethyl hexane MF \_\_\_\_\_ 2,3 dimethyl butane MF \_\_\_\_\_

**8. ISOMERS OF BUTANE**

Name \_\_\_\_\_ MF \_\_\_\_\_ Name \_\_\_\_\_ MF \_\_\_\_\_

**9. CYCLOALKANES**

Cyclohexane MF = \_\_\_\_\_ methyl cyclopentane MF = \_\_\_\_\_

10. Write the general formula for each of the following.

alkenes \_\_\_\_\_ alkadienes \_\_\_\_\_ alkynes \_\_\_\_\_