

EXPERIMENT 11 Organic Models

Purpose: To make models of organic compounds

Procedure and Observations and Data:

1. Building molecules (This is to be done in groups of 2)

Obtain the molecular modeling kits from the stockroom

1. Build the following molecules and draw the structure after you have built it. Show each model to your instructor before you take it apart. Do not take them apart until you have the initials.

| | |
|------------------|--|
| H ₂ | |
| N ₂ , | |
| O ₂ | |
| Cl ₂ | |
| I ₂ | |
| H ₂ O | |
| NH ₃ | |

Instructor's Initials _____

| | |
|--|--|
| CH_4 Name: | |
| CCl_4 Name: | |
| C_2H_6 Name: | |
| C_3H_8 Name: | |
| C_8H_{18} Name: | |
| CO_2 | |
| $\text{C}_2\text{H}_5\text{OH}$ Name: | |

Instructor's Initials _____

Show 2wo different ways to make C_4H_{10}

| | |
|-------|-------|
| Name: | Name: |
|-------|-------|

Show two different ways to make C_3H_7Cl

| | |
|-------|-------|
| Name: | Name: |
|-------|-------|

Show 3 different ways to make C_5H_{12}

| | | |
|-------|-------|-------|
| Name: | Name: | Name: |
|-------|-------|-------|

Instructor's Initials _____

Show how to make C_2H_4

Name:

Make a benzene ring C_6H_6

Instructor's Initials _____

Organize your atoms and bonds as they were when you checked them out. Return them to the stockroom.