

2.3: Alkanes and Alkenes Report Sheets

Name: _____

Lab Partner's Name: _____

Date of Lab: _____

Data Table (2 points)

Record your careful observations for the tests you perform.

Compound	Combustion	Bromine Test	KMnO ₄ Test
Cyclohexane			
Cyclohexene			
Unknown			

Identification of Unknown

1. Is your unknown an alkane or an alkene? Write at least one paragraph in complete sentences describing the reasoning behind your choice (2 points)
2. Write a balanced reaction for each of the tests you did with the cyclohexane and cyclohexene. If no reaction occurred write "no reaction". (1 point each)
 - Combustion of Cyclohexane:

 - Bromination of Cyclohexane:

- Oxidation of Cyclohexane:
- Combustion of Cyclohexene:
- Bromination of Cyclohexene:
- Oxidation of Cyclohexene:

Modeling and Naming

1. Make models of the following and then draw the structure: (0.5 points each)

- butane

- pentane

- ethene

- propene

- 1-butene

- cis-2-butene

- Cyclohexane

- Cyclohexene

- 3-methylcyclohexene

- 1-methylcyclopentene

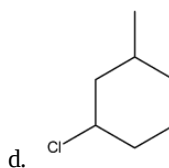
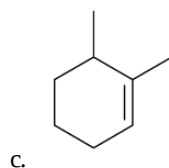
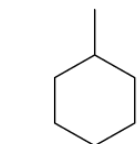
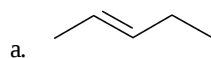
- 2-methyl-2-pentene

- chloromethane

o 1,2 dibromoethane

o 1,1-dibromoethane

2. Make models of the following and then name the structure: (0.5 points each)



3. (0.5 points each) Write a balanced reaction of the following reactants. If there is no reaction write "no reaction".

