

Name \_\_\_\_\_

Chemistry 4X, Sec \_\_\_\_\_

**Reactions of Hydrocarbons**  
**Experiment #2**

**Pre-Lab Exercise**

1. How would you describe the difference between saturated and unsaturated hydrocarbons and what is a distinguishing feature of aromatic hydrocarbons.
2. Describe the relative reactivity of alkanes, alkenes and aromatic hydrocarbons with respect to their chemical reactions. You may want to give some examples in your answer.
3. Alkanes find many commercial uses. Give at least 3 commercial uses for alkanes and name one alkane that is used as you describe. You may want to give the names of 3 specific alkanes and describe how each is used.
4. Safety in the Laboratory should be read before beginning experiments for the semester. It mentions that glassware should be cleaned at the end of each experiment and gives one particular reason for doing this. What is that reason?

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Name \_\_\_\_\_

Section \_\_\_\_\_

**Reactions of Hydrocarbons**  
**Experiment #2****Data & Report Sheet**Table 1. Observations for reactions with  $\text{KMnO}_4$ , bromine and test for aromatic hydrocarbons.

		Part A. Baeyers Test with $\text{KMnO}_4$	Part B. Reaction with Bromine	Part C. Reaction with Chloroform/ $\text{AlCl}_3$
# 1	Hexane			*****
# 2	Cyclo- hexane			
# 3	Hexene			*****
# 4	Cyclo- hexene			
# 5	m-Xylene			
# 6	Unknown			

Unknown Number \_\_\_\_\_

Type of Hydrocarbon for Unknown \_\_\_\_\_

Answer questions on back of page

