

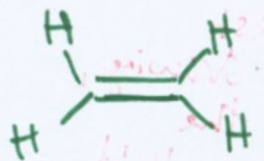
WORKSHEET 8: Hydrocarbons

1. Rank the difference in lengths of different bonds

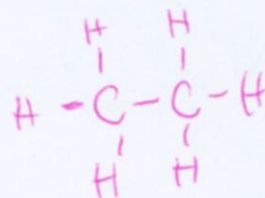
Single > double > triple
↑ ↑
longest shortest

2. What are the four types of hydrocarbons?

Alkanes - Single bonded hydrocarbons



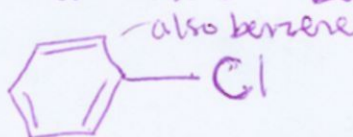
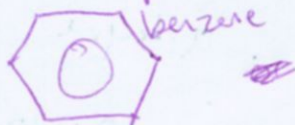
alkenes. contain at least 1 ~~hydro~~
Carbon-Carbon double bond



Alkynes - contain at least 1 C-C triple bond



aromatic compound - contain at least one benzene ring



3. Draw 3 cyclic hydrocarbon structures and name them

★ Many possible answers

Cyclopentane



Cyclooctyne



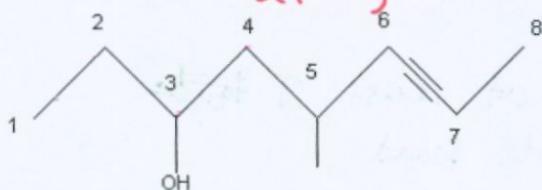
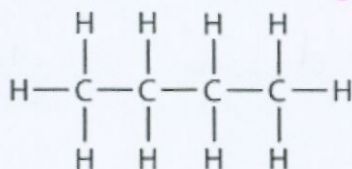
cyclobutene



4. Label the following compounds as one of the types of hydrocarbons and name them

alkane

butane



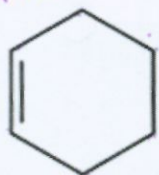
alkyne

Octyne

★ I apologize this is not the best drawing, why the C's are #'d

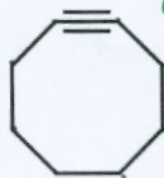
cyclohexene

alkene



alkyne

cyclooctyne



★ Both are not aromatic compounds



alkyne

also Octyne