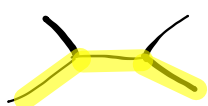
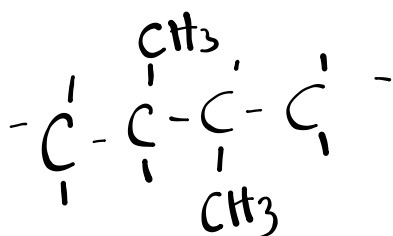


# Worksheet 47 - Questions?

(11)



2,3-dimethylbutane

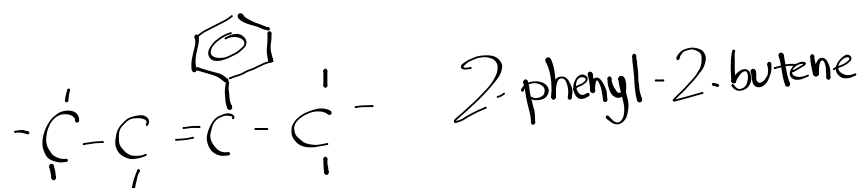


# Common Mistakes...

Benzene vs. Cyclohexane



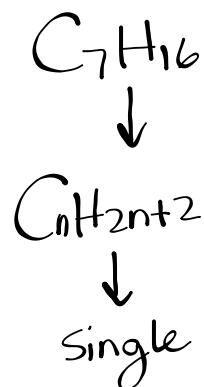
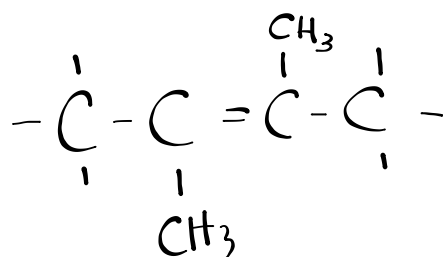
Benzene as a branch (phenyl)



1,2    1,3    1,4

ortho, meta, para-dimethylbenzene

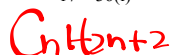
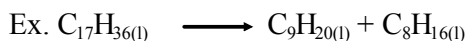
dimethyl-2-butene



# Reactions

**cracking** - reaction in which hydrocarbons are broken into smaller fragments

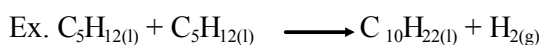
- this reaction occurs in the absence of air, and **with a catalyst or heat**, to speed up the reaction.



**\*atoms must be conserved!**

**reforming** - reaction in which large molecules are formed from smaller ones

- this reaction normally occurs with the help of a catalyst or heat

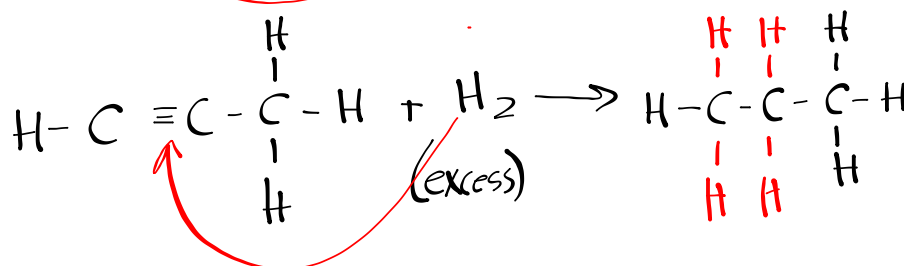
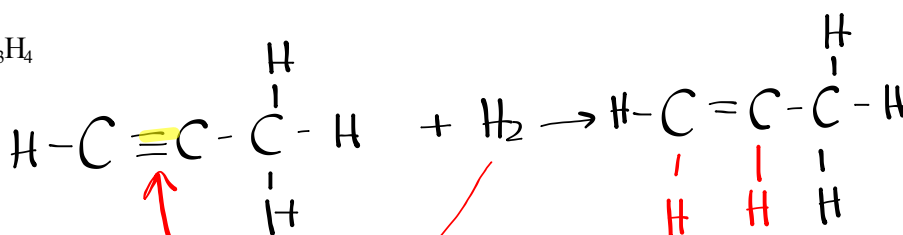
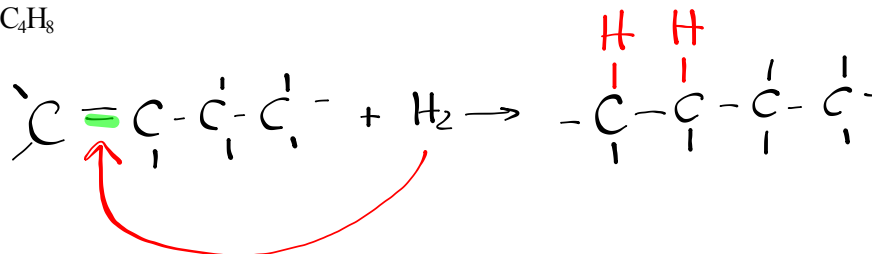


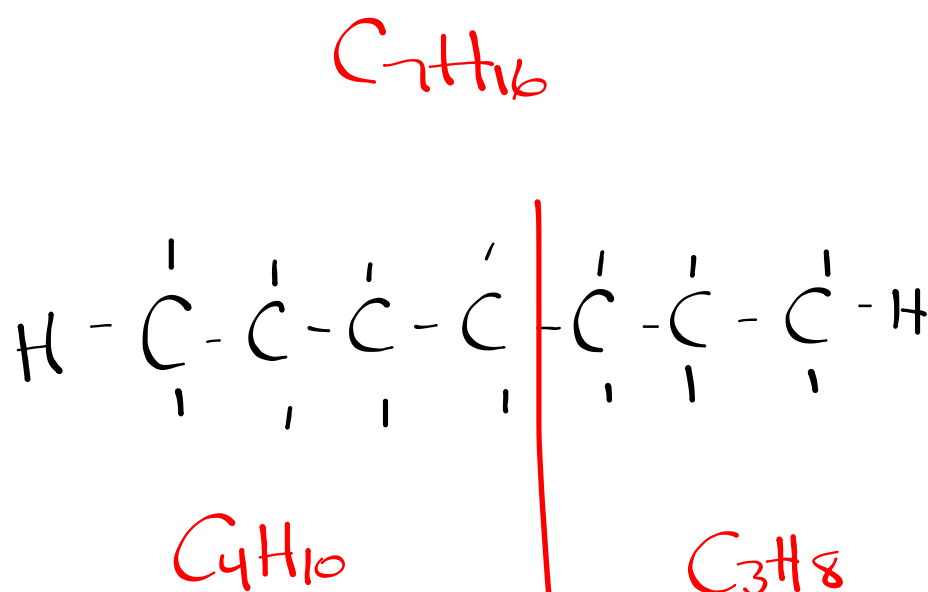
**combustion** - a reaction between a compound and oxygen to produce the most common oxides.



"burning"

**addition (hydrogenation) reaction** - a reaction in which an unsaturated molecule reacts with hydrogen (diatomic).







# Worksheet - Naming Hydrocarbons