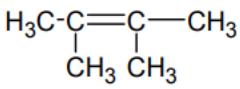
Chemistry 11: Worksheet - Naming Alkenes & Alkynes (KEY) **Name: _____**

Date: _____

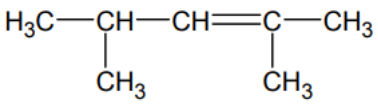
1. Name the following hydrocarbons. (Make sure you find the longest chain!)

a.



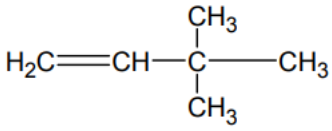
2,3-dimethyl-2-butene

b.



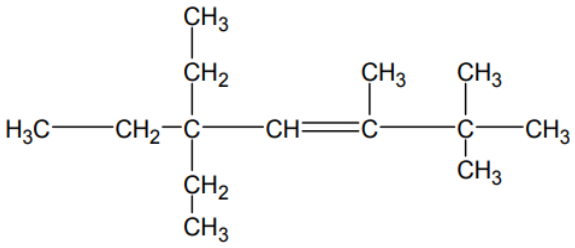
2,4-dimethyl-2-pentene

c.



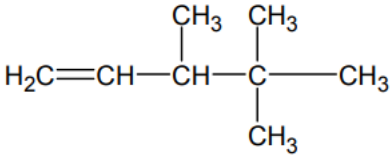
3,3-dimethyl-1-butene

d.



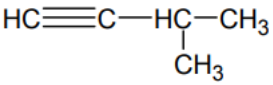
5,5-diethyl-2,2,3-trimethyl-3-heptene

e.



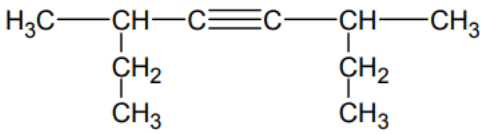
3,4,4-trimethyl-1-pentene

f.



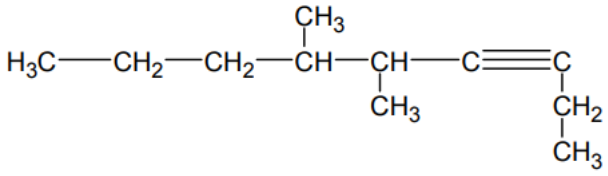
3-methyl-1-butyne

g.



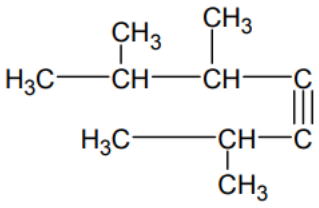
3,6-dimethyl-4-octyne

h.



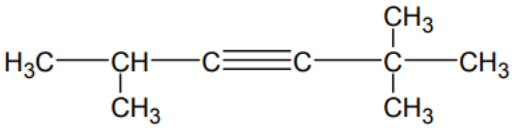
5,6-dimethyl-3-nonyne

i.



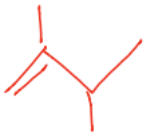
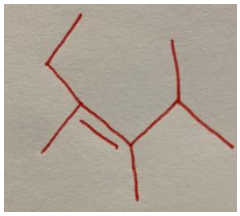
2,5,6-trimethyl-3-heptyne

j.

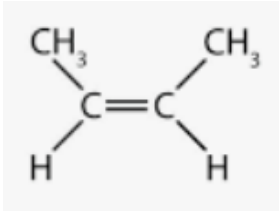
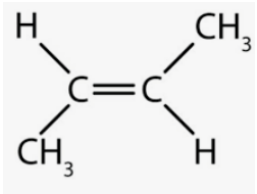


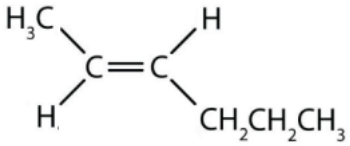
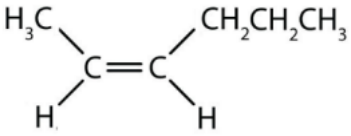
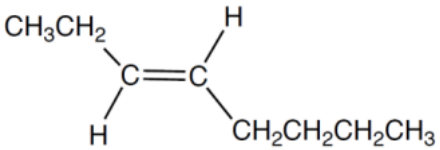
2,2,5-trimethyl-3-hexyne

2. Draw structures for the following (use the structural formula of your choice).

a. 2-ethyl-1-pentene 	b. 2,3-dimethyl-1-butene 
c. 2,3,4 – trimethyl-1-hexene 	d. 2-ethyl-3,4-dimethyl-2-pentene 
e. 3-ethyl-1-pentyne 	f. 3,3-dimethyl-1-butyne 
g. 4,4,5 – trimethyl-2-hexyne 	h. 4-ethyl-4-methyl-2-pentyne 

3. Identify the each of the following as cis or trans isomers and write the IUPAC name.

a.  ***cis*-2-butene**	b.  ***trans*-2-butene**

c.  ***trans*-3-hexene**	d.  ***cis*-3-hexene**
e.  ***cis*-1-bromo-2-chloroethene**	f.  ***trans*-3-octene**