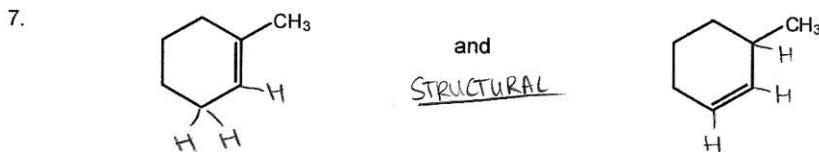
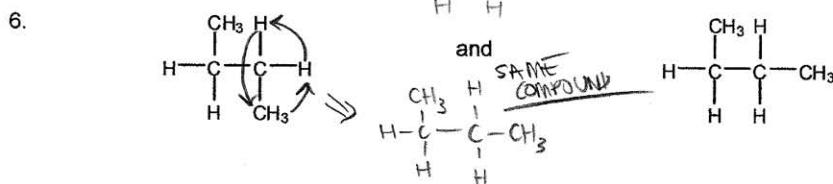
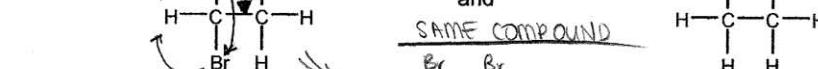
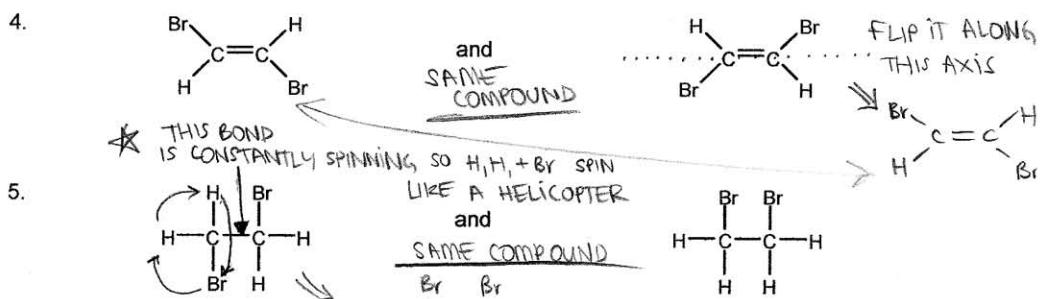
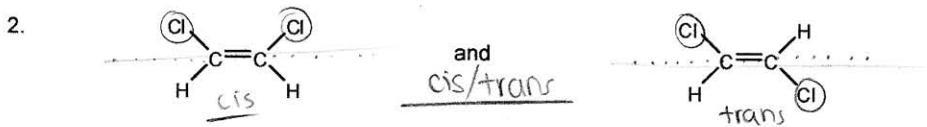
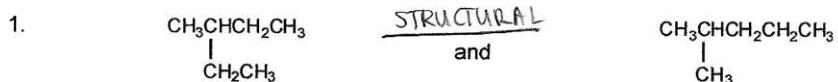


Chapter 02 Worksheet 02

Give the relationship between the following pairs of structures. The possible relationships are: the same compound, constitutional (structural) isomers, cis/trans isomers, or not isomers (different molecular formula)

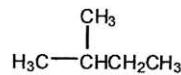


Rank the following in order of increasing boiling point (1 = lowest, 3 = highest)

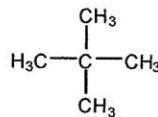
8. BRANCHING LOWERS
BOILING POINT



3

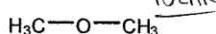


2



1

9. POLAR



2 medium
intermolecular
interaction

ALCOHOL (HYDROGEN)
BONDS



3 ↑
hi intermolecular
interactions

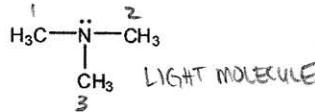
NON POLAR



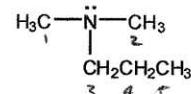
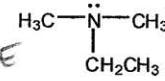
1

only London
dispersion

10.



LIGHT MOLECULE



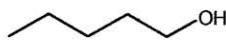
HEAVY
MOLECULE

1

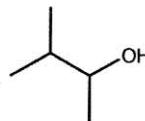
2

3

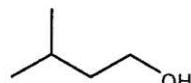
11.



3

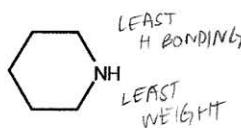


1

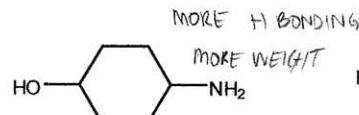


2

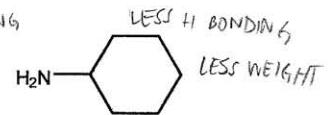
12.



1

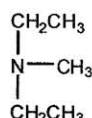
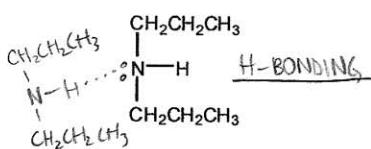
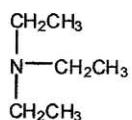


3



2

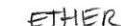
13.

 2 3 1

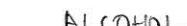
14.



NON POLAR
LONDON
DISPERSION

 1

$\text{CH}_3\text{CH}_2-\text{O}-\text{CH}_3$
POLAR

 2

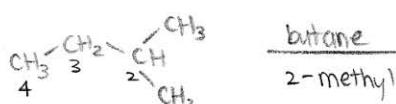
$\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$

POLAR + H-BOND

 3

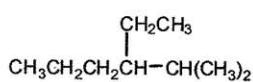
Provide the IUPAC names for the following compounds.

15.

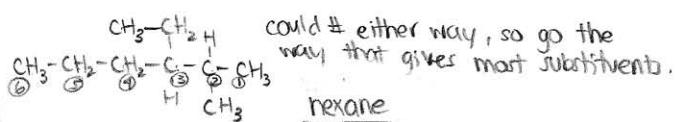


2-methylbutane

16.



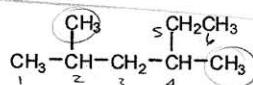
3-ethyl-2-methylhexane



hexane

2-methyl
3-ethyl

17.



hexane

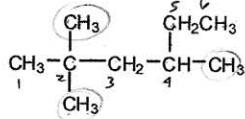
2-methyl
4-methyl
2,4-dimethyl

hexane

2-methyl
3-ethyl

2,4-dimethylhexane

18.

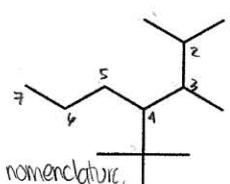


hexane

2-methyl
2-methyl
4-methyl
2,2,4-trimethyl

2,2,4-trimethylhexane

19.



heptane

2-methyl
3-methyl
4-tert-butyl
2,3-dimethyl

4-tert-butyl-2,3-dimethylheptane

*NOTE:

when doing nomenclature,
alphabetize substituents, though
only iso, neo + cyclo count. not di, tri, tetra...