

1. An ionic bond is between a _____ and a _____.
2. A covalent bond is between a _____ and a _____.
3. Here is a list of compounds:

BaO chromium (III) sulfide CO₂ CH₃CH₃ AlN H₂O
sulfur trifluoride AgI NaCl carbon tetrachloride FeBr₂

(a) Which ones have ionic bonds? _____

(b) Which ones have covalent bonds? _____

4. What does organic chemistry study? _____
5. What are hydrocarbons? _____

6. Fill in the following chart about carbon prefixes:

# of carbons	prefix	# of carbons	prefix
1 carbon		6 carbons	
2 carbons		7 carbons	
3 carbons		8 carbons	
4 carbons		9 carbons	
5 carbons		10 carbons	

7. Draw the structures of the following (you may just draw lines for the hydrogens):

(a) propane

(b) nonane

(c) heptane

(d) cyclohexane

8. What is an isomer? _____

9. Are pentane and cyclopentane isomers? Include two drawings with your answer.

10. Draw two different isomers of octane:

11. Why can't there be a cycloethane or a methyne? _____

7. Draw the **stylized** structures of the following:

(a) butane

(b) heptene

(c) cyclohexane

(d) decyne

7. Name the following ORGANIC compounds using the CARBON prefixes:

