

1. What are the three types of bonds we have learned about? _____

2. What is electronegativity? _____

3. Fill in the following chart about electronegativity difference and type of bond:

Electronegativity Difference	Type of Bond

4. Which type of bond has a slightly positive and slightly negative end? _____
5. How many valence electrons make an atom stable? _____
6. Add the valence electrons (Lewis dots) to each of the following atoms:

H C N O F S Cl

7. 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	

8. (a) How many bonds does carbon ALWAYS form? _____
(b) How many bonds does oxygen always form? _____
(c) How many bonds does hydrogen always form? _____
9. Explain what the following prefixes and suffixes mean in an organic compound's name:
-ane _____ -ene _____
cyclo- _____ -yne _____

10. Decide if the following bonds are polar or nonpolar covalent:

C-H	_____	N-H	_____
C-O	_____	C-S	_____
C-C	_____	H-Cl	_____
C-F	_____	O-H	_____
C-Cl	_____	F-H	_____

11. Decide if the following MOLECULES are polar or nonpolar:

