

Name: _____
Period: _____

Chemical Bonds: Practice with Covalent Bonding

1. What is the difference between a covalent bond and an ionic bond?
2. What are the four main properties of covalent bonds?
 - 1.
 - 2.
 - 3.
 - 4.
3. Up to how many bonds can occur between two atoms? _____
4. How many valence electrons does each of the following atoms have?
H _____ C _____ N _____ O _____ Si _____ Cl _____
5. How many bonds do each of the following elements make (think of valence electrons)?
H _____ C _____ N _____ O _____ Si _____ Cl _____

Draw a Lewis dot diagram for each AND a bond diagram for each of the following Compounds:

6. H_2 (Hydrogen)	7. F_2 (Fluorine)
8. Cl_2 (Chlorine)	9. PH_3 (Phosphine)
10. PH_5 (Phosphorus Pentachloride)	11. SiH_4 (Silicon Hydroxide)
12. CO_2 (Carbon Dioxide)	13. N_2 (Nitrogen)