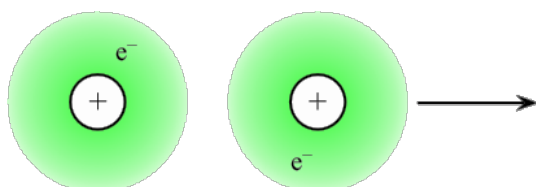


**WKS – Chem Honors**  
**Covalent Bonding & Compounds**

**NAME** \_\_\_\_\_  
**Period** \_\_\_\_\_ **Date** \_\_\_\_\_

1. What is a covalent bond? How does it differ from an ionic bond? Why does it form?
2. On the atomic diagram below, indicate with arrows this attraction, then redraw the atoms to show the covalent bond formation and label the bond length,  $d$ .



3. How many electrons are shared in a single covalent bond? Double bond? Triple bond? Rank them in order of length and strength.

In the table below, determine the formula of the binary covalent compound or acid from its name, or the name of the compound from the formula.

Name to Formula	Formula to Name
4. antimony tribromide	15. $P_4S_5$
5. iodine pentafluoride	16. $SeO_3$
6. dinitrogen trioxide	17. $Si_2Br_6$
7. ammonia	18. $SCl_4$
8. phosphorus triiodide	19. $CH_4$
9. carbon monoxide	20. $NF_3$
10. phosphorous pentachloride	21. $N_2O$
11. tetraiodine nonoxide	22. $IF_7$
12. bromine trichloride	23. $P_4O_{10}$
13. xenon hexafluoride	24. $SeF_4$