

Name _____

Period ____ Date ____/____/____

4 • Bonding, Nomenclature & Molecular Structure

MOLECULAR COMPOUNDS

PART A – MOLECULAR NAMES

Endings for some of the elements: oxygen → **oxide**, nitrogen → **nitride**, fluorine → **fluoride**, sulfur → **sulfide**, phosphorus → **phosphide**, bromine → **bromide**, iodine → **iodide**

Prefixes: 1 = _____, 2 = _____, 3 = _____, 4 = _____, 5 = _____, 6 = _____, 7 = _____, 8 = _____, 9 = _____, 10 = _____

Name the following compounds.

1. SiO₂ _____

5. OF₂ _____

2. S₄N₂ _____

6. AsCl₃ _____

3. Cl₂O _____

7. NO₂ _____

4. PF₃ _____

8. CO _____

PART B – MOLECULAR FORMULAS

Write formulas for the following compounds.

9. sulfur trioxide _____

14. dinitrogen pentoxide _____

10. carbon tetrachloride _____

15. diphosphorus trisulfide _____

11. diphosphorous pentoxide _____

16. phosphorus pentachloride _____

12. sulfur hexafluoride _____

17. selenium hexachloride _____

13. silicon tetrabromide _____

18. boron trifluoride _____