

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Chemistry

Worksheet 58



# Chemical Bonding

**Directions:** Describe the following terms.

electronegativity –

octet rule –

oxidation number –

chemical bond –

ionic bond –

covalent bond –

polar bond –

**Directions:** Tell whether the following elements will **GAIN** or **LOSE** electrons.

\_\_\_\_\_ 8. S                  \_\_\_\_\_ 9. F                  \_\_\_\_\_ 10. Na                  \_\_\_\_\_ 11. Ar

\_\_\_\_\_ 12. Ca                  \_\_\_\_\_ 13. N                  \_\_\_\_\_ 14. O                  \_\_\_\_\_ 15. H

**Directions:** Determine the possible **charge** of each of the following elements.

\_\_\_\_\_ 16. S                  \_\_\_\_\_ 17. F                  \_\_\_\_\_ 18. Na                  \_\_\_\_\_ 19. Ar

\_\_\_\_\_ 20. Ca                  \_\_\_\_\_ 21. N                  \_\_\_\_\_ 22. O                  \_\_\_\_\_ 23. H

**Directions:** Determine the possible bonds of each of the following elements.

\_\_\_\_\_ 24. S                  \_\_\_\_\_ 25. F                  \_\_\_\_\_ 26. Na                  \_\_\_\_\_ 27. Ar

\_\_\_\_\_ 28. Ca                  \_\_\_\_\_ 29. N                  \_\_\_\_\_ 30. O                  \_\_\_\_\_ 31. H

**"Knowing is not enough; we must apply. Willing is not enough; we must do."  
- Johann Wolfgang von Goethe**