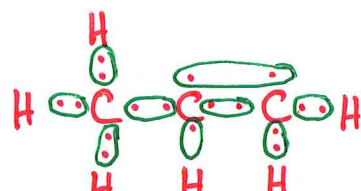
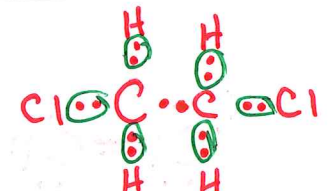
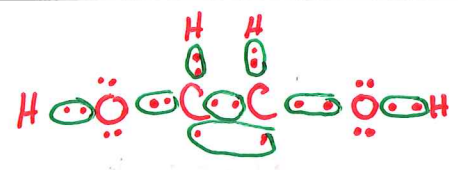
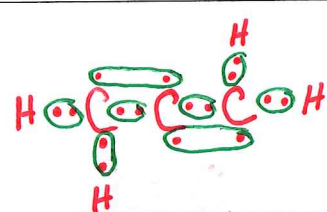
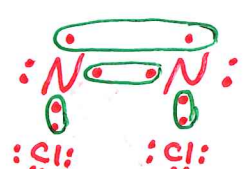


Covalent Bond Formation

(Honors Chemistry)

| Formula | Dot Structures | Structural Formula | Unshared Pairs |
|------------------|----------------|--------------------|----------------|
| Cl ₂ | | | 6 |
| N ₂ | | | 2 |
| O ₂ | | | 4 |
| H ₂ O | | | 2 |
| CO ₂ | | | 4 |
| CH ₄ | | | 0 |
| NH ₃ | | | 1 |

| | | | |
|--------------|---|----------------------------|-------------|
| C_3H_6 |  | $H-C(H)=C(H)-H$ | \emptyset |
| $C_2H_4Cl_2$ |  | $:Cl-C(H)_2-Cl:$ | 6 |
| $C_2H_4O_2$ |  | $H-O-C(=O)-O-H$ | 4 |
| C_3H_4 |  | $H-C(H)=C(H)-H$ | \emptyset |
| N_2Cl_2 |  | $:N=Cl-N=Cl:$ | 8 |
| C_4H_6 | | $H-C(H)-C \equiv C-C(H)-H$ | \emptyset |
| PCl_3 | | $:Cl-P(Cl)_2-Cl:$ | 10 |
| H_2O_2 | | $:O(H)-O(H):$ | 4 |

| | | | |
|---------------------------------|--|--|---|
| CH ₄ O | | $ \begin{array}{c} \text{H} \\ \\ \text{H}-\text{C}-\ddot{\text{O}}-\text{H} \\ \\ \text{H} \end{array} $ | 2 |
| NF ₃ | | $ \begin{array}{c} \ddot{\text{N}} \\ / \quad \backslash \\ \text{H} \quad \quad \text{H} \\ \\ \text{H} \end{array} $ | 1 |
| C ₂ H ₆ | | $ \begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H}-\text{C}-\text{C}-\text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array} $ | ∅ |
| HCN | | $ \text{H}-\text{C}\equiv\text{N}: $ | 1 |
| C ₄ H ₇ N | | $ \begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{C}\equiv\text{N}: \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array} $ | 1 |
| C ₂ H ₂ | | $ \text{H}-\text{C}\equiv\text{C}-\text{H} $ | ∅ |
| C ₃ H ₈ | | $ \begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{H} \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array} $ | ∅ |