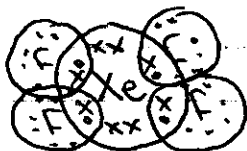
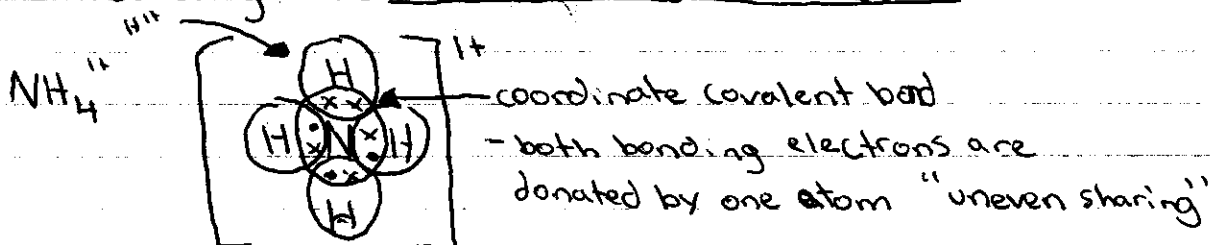


More Difficult Lewis Dot Diagrams

1. Halogens - always form simple single covalent bonds even if this breaks the octet rule.



2. Introducing the Coordinate Covalent Bond



3. Ways Oxygen Can Bond (Versatile)

- always possible to produce satisfied octets

- a) halogen like oxygen

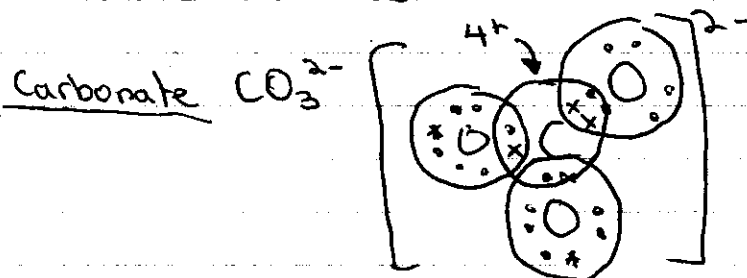
- when a -ve charge is present on an oxy-anion the negative charge will always reside on an oxygen atom (the more electronegative atom)

eg ClO^- $\cdot \ddot{O}^-$ The oxygen "looks" like a halogen.



- b) oxygen can double bond

- when it does, it increases the number of valence e^- around the central atom by 2 e^-
- ~~add~~ add 2 valence e^-



c) The coordinate covalent bond

- very useful
- does not alter the number of e^- around the central atom
- (maintains octet)

