

Chemical Bonding Notes

When atoms or molecules react, the atoms are joined together by a “chemical bond.” This happens when atoms are trying to get a full valence shell, and it can happen in one of 2 ways:

1. Ionic Bond: e are TRANSFERRED - one type of atom loses e to become a positive ion, another type of atom gains the e to become a negative ion, and the oppositely charged ions are then pulled together. Usually between a metal and a non-metal.
2. Covalent Bond: e are SHARED – atoms will overlap their valence shells and share e. Usually between 2 non-metals

Drawing Bohr Diagrams of Ions and Compounds

Ex. Draw Beryllium ion

Cl ion

Be & Cl

Na & O

CH₄

H₂O

NH₃