

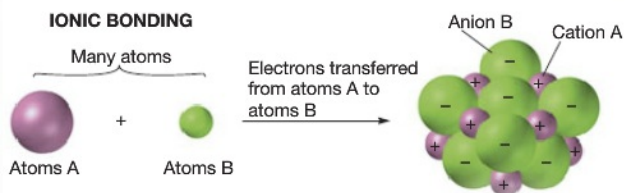
Unit 3: Ionic Bonding

Text References:

- Introduction to Chemical Bonding (6.1)
- Ionic Bonding (6.3)
- Metallic Bonding (6.4)
- Chemical Names and Formulas (7.1)

Focus Questions:

- How do ionic bonds form?
- How are the formulas for ionic compounds written and named?
- What are the physical properties of ionic compounds and metals?



Unit Objectives (what you need to know and be able to do on the test):

1. Define ionic and metallic bonding.
2. Discuss the arrangements of ions within a crystal lattice.
3. List and compare the physical properties of ionic compounds.
4. Determine the formula of an ionic compound formed from a given cation and anion.
5. Name an ionic compound given its formula.
6. Describe the electron-sea model of metallic bonding.
7. Explain why metals are malleable and ductile.

Vocabulary:

- chemical bond
- ionic bond
- covalent bond
- chemical formula
- electron-dot notation
- ionic compound
- formula unit
- polyatomic ion
- monatomic ion
- binary compound
- nomenclature
- oxyanion
- metallic bond
- electron sea model
- alloy

