

SECTION 7.2 IONIC BONDS AND IONIC COMPOUNDS

- Use electron dot structures to predict the formula of the ionic compounds formed when the following elements combine.
 - sodium and bromine
 - sodium and sulfur
 - calcium and iodine
 - aluminum and oxygen
 - barium and chlorine
- Which of these combinations of elements are most likely to react to form ionic compounds?
 - sodium and magnesium
 - barium and sulfur
 - potassium and iodine
 - oxygen and argon
- What is the meaning of coordination number?
- How is the coordination number determined?

SECTION 7.3 BONDING IN METALS

- What is a metallic bond?
- How is the electrical conductivity of a metal explained by metallic bonds?
- Are metals crystalline? Explain.
- Give three possible crystalline arrangements of metals. Describe each.
- What is an alloy?
- Name the principal elements present in each of the following alloys.
 - brass
 - bronze
 - stainless steel
 - sterling silver
 - cast iron
 - spring steel