

# BASIC CONCEPTS OF CHEMISTRY

## Chapter 9

### The Chemical Bond

#### Objectives:

- \* Write the Lewis dot symbols of atoms and monatomic ions by following the octet rule
- \* Using the Lewis dot structure and the octet rule, predict the charges on the ions of representative elements and the formulas of binary ionic compounds
- \* Apply the octet rule to determine the number of bonds formed in simple compounds
- \* Draw Lewis structures of a number of molecular compounds and polyatomic ions
- \* Write multiple Lewis structures for molecules capable of resonance
- \* Determine the validity of a Lewis structure based on formal charge considerations