

# WORLD OF CHEMISTRY

## Chapter 3

### CHEMICAL FOUNDATIONS: Elements, Atoms and Ions

#### Objectives:

- \* To learn about the relative abundance of the elements
- \* To learn the names of some of the elements
- \* to learn the symbols of some of the elements
- \* To learn about Dalton's theory of atoms
- \* To learn about the law of constant composition
- \* To learn how a formula describes a compound's composition
- \* To learn about the parts of the atom
- \* To learn about Rutherford's experiment
- \* To describe the features of subatomic particles
- \* To learn about atomic numbers, mass numbers and isotopes
- \* To understand the use of  ${}^A_ZX$  to describe a given atom
- \* To learn the various features of the Periodic Table
- \* To learn some of the properties of metals, non-metals, and metalloids
- \* To learn the natures of common elements
- \* To describe the formation of ions from their parent atoms and learn to name them
- \* To learn which ion forms from an atom's position on the Periodic Table
- \* To learn how ions combine to form neutral compounds