

CHAPTER OVERVIEW

1: Elements and Periodicity

The elements are found in various states of matter and define the independent constituents of atoms, ions, simple substances, and compounds. Isotopes with the same atomic number belong to the same element. When the elements are classified into groups according to the similarity of their properties as atoms or compounds, the periodic table of the elements emerges. Chemistry has accomplished rapid progress in understanding the properties of all of the elements. The periodic table has played a major role in the discovery of new substances, as well as in the classification and arrangement of our accumulated chemical knowledge. The periodic table of the elements is the greatest table in chemistry and holds the key to the development of material science. Inorganic compounds are classified into molecular compounds and solid-state compounds according to the types of atomic arrangements.

[1.1: The origin of elements and their distribution](#)

[1.2: Discovery of elements](#)

[1.3: Electronic Structure of Elements](#)

[1.4: Block classification of the periodic table and elements](#)

[1.5: Bonding states of elements](#)

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