

TABLE OF CONTENTS

Licensing

1: Elements and Periodicity

- 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

2: Bonding and Structure

- 2.1: Classification of bonding
- 2.2: Geometrical factors governing bonding and structure
- 2.3: Electronic factors which govern bonding and structure

3: Reactions

- 3.1: Thermodynamics
- 3.2: Electrochemistry
- 3.3: Oxidation and Reduction
- 3.4: Acid and base

4: Chemistry of Nonmetallic Elements

- 4.1: Hydrogen and hydrides
- 4.2: Main group elements of 2nd and 3rd periods and their compounds
- 4.3: Oxygen and oxides (Part 1)
- 4.4: Oxygen and oxides (Part 2)
- 4.5: Chalcogens and Chalcogenides
- 4.6: Halogens and Halides
- 4.7: Noble Gases and their Compounds

5: Chemistry of Main-Group Metals

- 5.1: Group 1 Metals
- 5.2: Group 2 Metals
- 5.3: Group 12 Metals
- 5.4: Group 13 Metals
- 5.5: Group 14 Metals

6: Chemistry of Transition Metals

- 6.1: Structures of Metal Complexes
- 6.2: Electronic Structure of Complexes (Part 1)
- 6.3: Electronic Structure of Complexes (Part 2)
- 6.4: Organometallic Chemistry of d Block Metals (Part 1)
- 6.5: Organometallic Chemistry of d Block Metals (Part 2)
- 6.6: Reactions of Complexes

7: Lanthanoids and Actinoids

- [7.1: Lanthanoids](#)
- [7.2: Actinoids](#)

8: Reaction and Physical Properties

- [8.1: Catalytic reactions](#)
- [8.2: Bioinorganic chemistry](#)
- [8.3: Physical properties](#)

9: Solution of problems

- [9.1: Chapter 1](#)
- [9.2: Chapter 2](#)
- [9.3: Chapter 3](#)
- [9.4: Chapter 4](#)
- [9.5: Chapter 5](#)
- [9.6: Chapter 6](#)
- [9.7: Chapter 7](#)
- [9.8: Chapter 8](#)

[Index](#)

[Glossary](#)

[Detailed Licensing](#)