

CHAPTER 8 STUDY GUIDE

Covalent Bonding

Section 8.1 The Covalent Bond

In your textbook, read about the nature of covalent bonds.

Use each of the terms below just once to complete the passage.

covalent bond

molecule

sigma bond

exothermic

pi bond

When sharing of electrons occurs, the attachment between atoms that results is called a(n) **(1)** _____. When such an attachment is formed, bond dissociation energy is released, and the process is **(2)** _____. When two or more atoms bond by means of electron sharing, the resulting particle is called a(n) **(3)** _____. If the electrons shared are centered between the two atoms, the attachment is called a(n) **(4)** _____. If the sharing involves the overlap of parallel orbitals, the attachment is called a(n) **(5)** _____.

In your textbook, read about single and multiple bonds and bond strength.

Circle the letter of the choice that best completes the statement or answers the question.

6. In what form do elements such as hydrogen, nitrogen, and oxygen normally occur?
 - a. as single atoms
 - b. as molecules containing two atoms
 - c. as molecules containing three atoms
 - d. as molecules containing four atoms
7. How many electrons are shared in a double covalent bond?
 - a. none
 - b. one
 - c. two
 - d. four
8. Bond length is the distance between
 - a. two molecules of the same substance.
 - b. the electrons in two attached atoms.
 - c. the nuclei of two attached atoms.
 - d. the orbitals of two attached atoms.
9. Which of the following relationships relating to bond length is generally correct?
 - a. the shorter the bond, the stronger the bond
 - b. the shorter the bond, the weaker the bond
 - c. the shorter the bond, the fewer the electrons in it
 - d. the shorter the bond, the lower the bond dissociation energy

Covalent Bonding Study Guide Key

Julie R. Frentrup

A red circular graphic with a gradient, appearing as a partial circle or a stylized 'C' shape, located to the right of the author's name.

Covalent Bonding Study Guide Key:

Study Guide with Answers to Selected Problems H. Stephen Stoker, Danny V. White, 2003-04 This supplement includes for each chapter a brief overview activities and practice problems to reinforce skills and a practice test The answers section includes answers for all odd numbered end of chapter exercises Know Your 'O' Level Chemistry - A Study Guide ,

Study Guide, Answer Book to Accompany Organic Chemistry Alan S. Wingrove, Robert L. Caret, 1981

Chemistry, Student Study Guide John A. Olmsted, Gregory M. Williams, 2002-01-04 This third edition continues to innovate by providing students with an integrated and modern approach to the subject The text emphasizes the modern tools of chemistry while incorporating historical evidence and its unique molecular quantitative emphasis is further reinforced by an integrated media package developed by the authors Also of benefit is the just in time presentation of key content only providing details once they are needed While key topics and analytical techniques have been updated there is now an additional third chapter on chemical equilibrium The authors have also developed an expanded and more integrated problem solving emphasis that now incorporates a 4 step strategy throughout complete with text icons The whole is backed by a range of supplements including a new illustration program a tutorial CD interactive learningware an extensive Web CT component an instructor s resource CD and a solution CD Study Guide for Chemistry, Third Edition [by] Steven S. Zumdahl Paul B. Kelter, 1993 A Level Chemistry Questions and Answers PDF Arshad Iqbal, The A Level Chemistry Quiz Questions and Answers PDF IGCSE GCE Chemistry Competitive Exam Questions Chapter 1 28 Practice Tests Class 11 12 Chemistry Textbook Questions for Beginners includes revision guide for problem solving with hundreds of solved questions A Level Chemistry Questions and Answers PDF book covers basic concepts analytical and practical assessment tests A Level Chemistry Quiz PDF book helps to practice test questions from exam prep notes The A Level Chemistry Quiz Questions and Answers PDF eBook includes revision guide with verbal quantitative and analytical past papers solved tests A Level Chemistry Questions and Answers PDF Free download chapter 1 a book covers solved common questions and answers on chapters Alcohols and esters atomic structure and theory benzene chemical compound carbonyl compounds carboxylic acids acyl compounds chemical bonding chemistry of life electrode potential electrons in atoms enthalpy change equilibrium group IV groups II and VII halogenoalkanes hydrocarbons introduction to organic chemistry ionic equilibria lattice energy moles and equations nitrogen and sulfur organic and nitrogen compounds periodicity polymerization rates of reaction reaction kinetics redox reactions and electrolysis states of matter transition elements tests for college and university revision guide Chemistry Interview Questions and Answers PDF Download free eBook s sample covers beginner s solved questions textbook s study notes to practice online tests The IGCSE GCE Chemistry Interview Questions Chapter 1 28 PDF book includes high school question papers to review practice tests for exams A Level Chemistry Practice Tests a textbook s revision guide with chapters tests for IGCSE NEET MCAT GRE GMAT SAT ACT competitive exam A Level Chemistry Questions Bank Chapter 1

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