

Mcmurry Fay Chemistry 5th Edition

The two-part, fifth edition of Advanced Organic Chemistry has been substantially revised and reorganized for greater clarity. The material has been updated to reflect advances in the field since the previous edition, especially in computational chemistry. Part A covers fundamental structural topics and basic mechanistic types. It can stand-alone; together, with Part B: Reaction and Synthesis, the two volumes provide a comprehensive foundation for the study in organic chemistry. Companion websites provide digital models for study of structure, reaction and selectivity for students and exercise solutions for instructors. Retaining the concise, to-the-point presentation that has already helped thousands of students move beyond memorization to a true understanding of the beauty and logic of organic chemistry, this Seventh Edition of John McMurry's FUNDAMENTALS OF ORGANIC CHEMISTRY brings in new, focused content that shows students how organic chemistry applies to their everyday lives. In addition, redrawn chemical structures and artwork help students visualize important chemical concepts, a greater emphasis on biologically-related chemistry (including new problems) helps them grasp the enormous importance of organic chemistry in understanding the reactions that occur in living organisms, and new End of Chapter problems keyed to OWL allow them to work text-specific problems online. Lastly, , for this edition, John McMurry reevaluated and revised his writing at the sentence level to ensure that the book's explanations, applications, and examples are more student-friendly, relevant, and motivating than ever before. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

For two-semester or three-quarter courses in General Chemistry. McMurry/Fay helps students and professors get to the heart of chemistry more effectively and helps students see the connections to chemistry more clearly. McMurry/Fay is known for its smart and precise presentation that blends the quantitative and visual aspects of General Chemistry. The 5th edition of McMurry/Fay builds on this foundation making the right connections in general chemistry topically, visually, and quantitatively. Chemistry is mastered when students make the right connections in three key areas; topics that are related, conceptual reasoning with quantitative work, and the different modes of communicating information. McMurry/Fay breaks through the boundaries traditionally imposed by textbooks that have historically made it difficult for students to make these connections on their own. Topic Connections, Conceptual and Quantitative parallel presentation, and Text-Graphic Integration Objects make these critical connections clear and visible, so students see the chemistry the first time. When you see the connections, you see the chemistry. Students don't use textbooks exactly the same way they used them in the past. The new layout of MF5 was designed to map to the way students seek and process information, and is based on conversations with students about the way they study.

It goes without saying that atomic structure, including its dual wave-particle nature, cannot be demonstrated in the classroom. Thus, for most science teachers, especially those in physics and chemistry, the textbook is their key resource and their students' core source of information. Science education historiography recognizes the role played by the history and philosophy of science in developing the content of our textbooks, and with this in mind, the authors analyze more than 120 general chemistry textbooks published in the USA, based on criteria derived from a historical reconstruction of wave-particle duality. They come to some revealing conclusions, including the fact that very few textbooks discussed issues such as the suggestion, by both Einstein and de Broglie, and before conclusive experimental evidence was available, that wave-particle duality existed. Other large-scale omissions included de Broglie's prescription for observing this duality, and the importance of the Davisson-Germer experiments, as well as the struggle to interpret the experimental data they were collecting. Also untouched was the background to the role played by Schrödinger in developing de Broglie's ideas. The authors argue that rectifying these deficiencies will arouse students' curiosity by giving them the opportunity to engage creatively with the content of science curricula. They also assert that it isn't just the experimental data in science that matters, but the theoretical insights and unwonted inspirations, too. In addition, the controversies and discrepancies in the theoretical and experimental record are key drivers in understanding the development of science as we know it today.

Chemistry 2e

Evolving Nature of Objectivity in the History of Science and its Implications for Science Education

How Science Works and its Importance for Science Education

Dune: House Atreides #2

Macmillan Encyclopedia of Chemistry

Table of contents

This book covers the basic concepts found in introductory high-school and college chemistry courses.

When you see the connections, you'll see the chemistry. Today's students use textbooks differently than in the past; and Chemistry , Sixth Edition is designed to map to the way you seek and process information. This book is known for a smart, precise presentation that blends the quantitative and visual aspects of general chemistry. Features like Remember..., Conceptual Problems, Conceptual Worked Examples, Inquiry and Worked Examples make these critical connections clear and visible, so you'll really see the chemistry the first time. This edition features the exact same content as the traditional text in a convenient, three-hole- punched, loose-leaf version. Books à la Carte also offer a great value--this format costs 35% less than a new textbook. Note: This is the standalone book, if you want the book/access card order the ISBN below: 0321787579 / 9780321787576 Chemistry, Books a la Carte Plus MasteringChemistry -- Access Card Package Package consists of 0321729773 / 9780321729774 MasteringChemistry with Pearson eText -- Valuepack Access Card -- for Chemistry 0321741609 / 9780321741608 Books a la Carte for Chemistry Comprehensive and up-to-date, this unique four-volume set offers readers a complete overview of the broad spectrum of general chemistry. It enables them to obtain a basic, yet thorough understanding of matter, the processes it undergoes, the principles that govern it, and the international cast of men and women who have been critical in the development of the science of chemistry. From elements, atoms, and molecules to terochemistry, spectroscopy, and chemical bonding, its clear and concise explanations provide an illuminating and readily comprehensible introduction. Key presentations include forty element definition articles, each providing basic periodic table information and general information on the element in question. Ninety-five biographical articles deal with prominent chemists, while other articles provide additional historical context, particularly with respect to eighteenth-, nineteenth-, and twentieth-century developments.

A Biological Approach

Organic Chemistry

The Basics of Chemistry

Nature of Science in General Chemistry Textbooks

Inorganic Chemistry

Fully revised and updated content matching new Cambridge International Examinations 9701 syllabus for first examination in 2016. Endorsed by Cambridge International Examinations, this digital edition comprehensively covers all the knowledge and skills students need during the A Level Chemistry course (9701), for first examination in 2016, in a reflowable format, adapting to any screen size or device. Written by renowned experts in Chemistry teaching, the text is written in an accessible style with international learners in mind. Self-assessment questions allow learners to track their progress, and exam-style questions help learners to prepare thoroughly for their examinations.

Answers to all the questions from within the Coursebook are provided.

This book explores the relationship between the content of chemistry education and the history and philosophy of science (HPS) framework that underlies such education. It discusses the need to present an image that reflects how chemistry developed and progresses. It proposes that chemistry should be taught the way it is practiced by chemists: as a human enterprise, at the interface of scientific practice and HPS. Finally, it sets out to convince teachers to go beyond the traditional classroom practice and explore new teaching strategies. The importance of HPS has been recognized for the science curriculum since the middle of the 20th century. The need for teaching chemistry within a historical context is not difficult to understand as HPS is not far below the surface in any science classroom. A review of the literature shows that the traditional chemistry classroom, curricula, and textbooks while dealing with concepts such as law, theory, model, explanation, hypothesis, observation, evidence and idealization, generally ignore elements of the history and philosophy of science. This book proposes that the conceptual understanding of chemistry requires knowledge and understanding of the history and philosophy of science. “Professor Niaz’s book is most welcome, coming at a time when there is an urgently felt need to upgrade the teaching of science. The book is a huge aid for adding to the usual way - presenting science as a series of mere facts - also the necessary mandate: to show how science is done, and how science, through its history and philosophy, is part of the cultural development of humanity.” Gerald Holton, Mallinckrodt Professor of Physics & Professor of History of Science, Harvard University “In this stimulating and sophisticated blend of history of chemistry, philosophy of science, and science pedagogy, Professor Mansoor Niaz has succeeded in offering a promising new approach to the teaching of fundamental ideas in chemistry. Historians and philosophers of chemistry --- and above all, chemistry teachers --- will find this book full of valuable and highly usable new ideas” Alan Rocke, Case Western Reserve University “This book artfully connects chemistry and chemistry education to the human context in which chemical science is practiced and the historical and philosophical background that illuminates that practice. Mansoor Niaz deftly weaves together historical episodes in the quest for scientific knowledge with the psychology of learning and philosophical reflections on the nature of scientific knowledge and method. The result is a compelling case for historically and philosophically informed science education. Highly recommended!” Harvey Siegel, University of Miami “Books that analyze the philosophy and history of science in Chemistry are quite rare. ‘Chemistry Education and Contributions from History and Philosophy of Science’ by Mansoor Niaz is one of the rare books on the history and philosophy of chemistry and their importance in teaching this science. The book goes through all the main concepts of chemistry, and analyzes the historical and philosophical developments as well as their reflections in textbooks. Closest to my heart is Chapter 6, which is devoted to the chemical bond, the glue that holds together all matter in our earth. The chapter emphasizes the revolutionary impact of the concept of the ‘covalent bond’ on the chemical community and the great novelty of the idea that was conceived 11 years before quantum mechanics was able to offer the mechanism of electron pairing and covalent bonding. The author goes then to describe the emergence of two rival theories that explained the nature of the chemical bond in terms of quantum mechanics; these are valence bond (VB) and molecular orbital (MO) theories. He emphasizes the importance of having rival theories and interpretations in science and its advancement. He further argues that this VB-MO rivalry is still alive and together the two conceptual frames serve as the tool kit for thinking and doing chemistry in creative manners. The author surveys chemistry textbooks in the light of the how the books preserve or not the balance between the two theories in describing various chemical phenomena. This Talmudic approach of conceptual tension is a universal characteristic of any branch of evolving wisdom. As such, Mansoor’s book would be of great utility for chemistry teachers to examine how can they become more effective teachers by recognizing the importance of conceptual tension”. Sason Shaik Saereer K. and Louis P. Fiedler Chair in Chemistry Director, The Lise Meitner-Minerva Center for Computational Quantum Chemistry, The Hebrew University of Jerusalem, ISRAEL

Intended for advanced undergraduates and graduate students in all areas of biochemistry, The Organic Chemistry of Biological Pathways provides an accurate treatment of the major biochemical pathways from the perspective of mechanistic organic chemistry.

"General Chemistry: Atoms First," Second Edition starts from the building blocks of chemistry, the atom, allowing the authors to tell a cohesive story that progresses logically through molecules and compounds to help students intuitively follow complex concepts more logically. This unified thread of ideas helps students build a better foundation and ultimately gain a deeper understanding of chemical concepts. Students can more easily understand the microscopic-to-macroscopic connections between unobservable atoms and the observable behavior of matter in daily life, and are brought immediately into real chemistryinstead of being forced to memorize facts. Reflecting a true atoms first perspective, the Second Edition features experienced atoms-first authors, incorporates recommendations from a panel of atoms-first experts, and follows historical beliefs in teaching chemistry concepts based and real experimental data first. This approach distinguishes this text in the market based whereby other authors teach theory first, followed by experimental data.

Feyerabend's Epistemological Anarchism

American Book Publishing Record

University Chemistry, 4/E

Bulletin University Medical School of Debrecen

Offers information on entrance and degree requirements, expenses and financial aid, programs of study, and faculty research specialties.

This book explores the evolving nature of objectivity in the history of science and its implications for science education. It is generally considered that objectivity, certainty, truth, universality, the scientific method and the accumulation of experimental data characterize both science and science education. Such universal values associated with science may be challenged while studying controversies in their original historical context. The scientific enterprise is not characterized by objectivity or the scientific method, but rather controversies, alternative interpretations of data, ambiguity, and uncertainty. Although objectivity is not synonymous with truth or certainty, it has eclipsed other epistemic virtues and to be objective is often used as a synonym for scientific. Recent scholarship in history and philosophy of science has shown that it is not the experimental data (Baconian orgy of quantification) but rather the diversity / plurality in a scientific discipline that contributes toward understanding objectivity. History of science shows that objectivity and subjectivity can be considered as the two poles of a continuum and this dualism leads to a conflict in understanding the evolving nature of objectivity. The history of objectivity is nothing less than the history of science itself and the evolving and varying forms of objectivity does not mean that one replaced the other in a sequence but rather each form supplements the others. This book is remarkable for its insistence that the philosophy of science, and in particular that discipline's analysis of objectivity as the supposed hallmark of the scientific method, is of direct value to teachers of science. Meticulously, yet in a most readable way, Mansoor Niaz looks at the way objectivity has been dealt with over the years in influential educational journals and in textbooks: it's fascinating how certain perspectives fade, while basic questions show no sign of going away. There are few books that take both philosophy and education seriously – this one does! Roald Hoffmann, Cornell University, chemist, writer and Nobel Laureate in Chemistry This Highly Readable Text Provides The Essentials Of Inorganic Chemistry At A Level That Is Neither Too High (For Novice Students) Nor Too Low (For Advanced Students). It Has Been Praised For Its Coverage Of Theoretical Inorganic Chemistry. It Discusses Molecular Symmetry Earlier Than Other Texts And Builds On This Foundation In Later Chapters. Plenty Of Supporting Book References Encourage Instructors And Students To Further Explore Topics Of Interest.

Aimed at senior undergraduates and first-year graduate students, this book offers a principles-based approach to inorganic chemistry that, unlike other texts, uses chemical applications of group theory and molecular orbital theory throughout as an underlying framework. This highly physical approach allows students to derive the greatest benefit of topics such as molecular orbital acid-base theory, band theory of solids, and inorganic photochemistry, to name a few. Takes a principles-based, group and molecular orbital theory approach to inorganic chemistry The first inorganic chemistry textbook to provide a thorough treatment of group theory, a topic usually relegated to only one or two chapters of texts, giving it a cursory overview Covers atomic and molecular term symbols, symmetry coordinates in vibrational spectroscopy using the projection operator method, polyatomic MO theory, band theory, and Tanabe-Sugano diagrams Includes a heavy dose of group theory in the primary inorganic textbook, most of the pedagogical benefits of integration and reinforcement of this material in the treatment of other topics, such as frontier MO acid--base theory, band theory of solids, inorganic photochemistry, the Jahn-Teller effect, and Wade's rules are fully realized Very physical in nature compare to other textbooks in the field, taking the time to go through mathematical derivations and to compare and contrast different theories of bonding in order to allow for a more rigorous treatment of their application to molecular structure, bonding, and spectroscopy Informal and engaging writing style: worked examples throughout the text: unanswered problems in every chapter: contains a generous use of informative, colorful illustrations

Atoms First

Introduction to Environmental Engineering and Science

Chemistry 5th Ed. MasteringCHEMISTRY Access Kit

Solutions Manual

Fundamentals of General, Organic, and Biological Chemistry

ALERT: Before you purchase, check with your instructor or review your course syllabus to ensure that you select the correct ISBN. Several versions of Pearson's MyLab & Mastering products exist for each title, including customized versions for individual schools, and registrations are not transferable. In addition, you may need a CourseID, provided by your instructor, to register for and use Pearson's MyLab & Mastering products. Packages Access codes for Pearson's MyLab & Mastering products may not be included when purchasing or renting from companies other than Pearson; check with the seller before completing your purchase. Used or rental books If you rent or purchase a used book with an access code, the access code may have been redeemed previously and you may have to purchase a new access code. Access codes Access codes that are purchased from sellers other than Pearson carry a higher risk of being either the wrong ISBN or a previously redeemed code. Check with the seller prior to purchase. -- Fundamentals of General, Organic, and Biological Chemistry by McMurry, Ballantine, Hoeger, and Peterson provides the background in chemistry and biochemistry essential for allied health students, while ensuring students in other disciplines gain an appreciation of chemistry's significance in everyday life. Unlike many texts on this subject, it is clear and concise, punctuated with practical and familiar examples from students' personal experiences. An exceptional balance of chemical concepts explains the quantitative aspects of chemistry, and provides deeper insight into theoretical chemical principles. It also sets itself apart by requiring students to master concepts before they can move on to the next chapter. The Seventh Edition focuses on making connections between General, Organic, and Biological Chemistry with a number of new and updated features-including all-new Mastering Reactions boxes, new and updated Chemistry in Action boxes (formerly titled Applications), new and revised chapter problems that strengthen the ties between major concepts in each chapter and practical applications, and much more. 032175011X / 9780321750112 Fundamentals of General, Organic, and Biological Chemistry with MasteringChemistry® Package consists of: 0321750837 / 9780321750839 Fundamentals of General, Organic, and Biological Chemistry 0321776461 / 9780321776464 MasteringChemistry® with Pearson eText -- Access Card -- for Fundamentals of General, Organic, and Biological Chemistry

The acclaimed prequel to the groundbreaking Dune continues in comic book form for the first time. Pardot Kynes arrives on Arrakis to begin research into terraforming the desert planet, but the merciless Baron Harkonnen has plans of his own. Meanwhile, the sadistic Harkonnens brutally test a young slave named Duncan Idaho. And Leto Atreides meets with the pioneers of space travel technology - taking the first steps towards his incredible destiny.

This workbook is a comprehensive collection of solved exercises and problems typical to AP, introductory, and general chemistry courses, as well as blank worksheets containing further practice problems and questions. It contains a total of 197 learning objectives, grouped in 28 lessons, and covering the vast majority of the types of problems that a student will encounter in a typical one-year chemistry course. It also contains a fully solved, 50-question practice test, which gives students a good idea of what they might expect on an actual final exam covering the entire material.

The new Introduction to Environmental Engineering and Science covers the basics needed to understand technology, manage resources, control pollution, and successfully comply with the regulations. Thoroughly updated and expanded, this edition features a new chapter and new coverage on risk and uncertainty analyses;

hydrology; basic principles of soil science, soil erosion, and sedimentation; mining; and policies, programs, and the latest status reports on key environmental issues.

Wastewater Engineering

Made In America

General Chemistry Workbook

Modern Physical Organic Chemistry

Books a La Carte Edition

Meet a genuine American folk hero cut from the homespun cloth of America's heartland: Sam Walton, who parlayed a single dime store in a hardscrabble cotton town into Wal-Mart, the largest retailer in the world. The undisputed merchant king of the late twentieth century, Sam never lost the common touch. Here, finally, inimitable words. Genuinely modest, but always sure of his ambitions and achievements.

Sam shares his thinking in a candid, straight-from-the-shoulder style. In a story rich with anecdotes and the "rules of the road" of both Main Street and Wall Street, Sam Walton chronicles the inspiration, heart, and optimism that propelled him to lasso the American Dream.

For too long we've been led to believe there are only two choices when it comes to cleaning our homes: either spend an arm and a leg on green products, or pollute our homes and the environment with noxious chemicals. No longer! Cheaper, Greener, Cleaner: Ceiling to Floor Savings shatters this myth with easy-to-follow recipes for inexpensive, homemade cleaners that will allow you to save money while going green. Spend pennies, not dollars, for your cleaning and laundry needs. Do away with mystery ingredients with unpronounceable names. No more guessing what's really in your cleaning and laundry products. Everything you need to create cheaper, greener cleaning products is already in your kitchen or can be found easily at your local store. If you can make a cake mix, you will have no problem following the step-by-step recipes provided. It really is that simple. Cheaper, Greener, Cleaner: Ceiling to Floor Savings will show you how to clean your twenty-first century home at a nineteenth-century price!

Research in science education has recognized the importance of history and philosophy of science (HPS). Nature of science (NOS) is considered to be an essential part of HPS with important implications for teaching science. The role played by textbooks in developing students' informed conceptions of NOS has been a source of considerable interest for science educators. In some parts of the world, textbooks become the curriculum and determine to a great extent what is taught and learned in the classroom. Given this background and interest, this monograph has evaluated NOS in university level general chemistry textbooks published in U.S.A. Most textbooks in this study provided little insight with respect to the nine criteria used for evaluating NOS. Some of the textbooks, however, inevitably refer to HPS and thus provide guidelines for future textbooks. A few of the textbooks go into considerable detail to present the atomic models of Dalton, Thomson, Rutherford, Bohr and wave mechanical to illustrate the tentative nature of scientific theories --- an important NOS aspect. These results lead to the question: Are we teaching science as practiced by scientists? An answer to this question can help us to understand the importance of NOS, by providing students an HPS-based environment, so that they too (just like the scientists) feel the thrill and excitement of discovering new things. This monograph provides students and teachers guidelines for introducing various aspects of NOS, based on historical episodes.

Renowned for his student-friendly writing style, John McMurry introduces a new way to teach organic chemistry: ORGANIC CHEMISTRY: A BIOLOGICAL APPROACH. Traditional foundations of organic chemistry are enhanced by a consistent integration of biological examples and discussion of the organic chemistry of biological pathways. This innovative text is coupled with media integration through

Organic ChemistryNow and Organic OWL, providing instructors and students the tools they need to succeed.

Advances in Gas Phase Ion Chemistry

Conceptual Chemistry

Treatment and Reuse

The Organic Chemistry of Biological Pathways

Chemistry Education and Contributions from History and Philosophy of Science

This book argues that the traditional image of Feyerabend is erroneous and that, contrary to common belief, he was a great admirer of science. It shows how Feyerabend presented a vision of science that represented how science really works. Besides giving a theoretical framework based on Feyerabend's philosophy of science, the book offers criteria that can help readers to evaluate and understand research reported in important international science education journals, with respect to Feyerabend's epistemological anarchism. The book includes an evaluation of general chemistry and physics textbooks. Most science curricula and textbooks provide the following advice to students: Do not allow theories in contradiction with observations, and all scientific theories must be formulated inductively based on experimental facts. Feyerabend questioned this widely prevalent premise of science education in most parts of the world, and in contrast gave the following advice: Scientists can accept a hypothesis despite experimental evidence to the contrary and scientific theories are not always consistent with all the experimental data. No wonder Feyerabend became a controversial philosopher and was considered to be against rationalism and anti-science. Recent research in philosophy of science, however, has shown that most of Feyerabend's philosophical ideas are in agreement with recent trends in the 21st century. Of the 120 articles from science education journals, evaluated in this book only 9% recognized that Feyerabend was presenting a plurality of perspectives based on how science really works. Furthermore, it has been shown that Feyerabend could even be considered as a perspectival realist. Among other aspects, Feyerabend emphasized that in order to look for breakthroughs in science one does not have to be complacent about the truth of the theories but rather has to look for opportunities to "break rules" or "violate categories." Mansoor Niaz carefully analyses references to Feyerabend in the literature and displays the importance of Feyerabend's philosophy in analyzing, historical episodes. Niaz shows through this remarkable book a deep understanding to the essence of science. - Calvin Kalman, Concordia University, Canada In this book Mansoor Niaz explores the antecedents, context and features of Feyerabend's work and offers a more-nuanced understanding, then reviews and considers its reception in the science education and philosophy of science literature. This is a valuable contribution to scholarship about Feyerabend, with the potential to inform further research as well as science education practice.- David Geelan, Griffith University, Australia

Gas phase ion chemistry is a broad field that has many applications and which encompasses various branches of chemistry and physics. Advances in Gas Phase Ion Chemistry, Volume 4, describes innovative ways of studying reactions as well as the application of unique apparatuses to problems in this field. This volume contains a series of chapters, in the general area of gas phase chemistry and physics, which are at the cutting edge of research. The chapters are not meant to be general reviews, but focus on the author's own work. They focus on both experimental and theoretical work, which gives a balance to the volume. Applications are included to appeal to a wider audience and to broaden the knowledge of the more fundamentally inclined. An application to environmental pollution monitoring and medical monitoring of breath is included. With successive volumes, the coverage broadens to include more current research in the title area. The book is aimed at graduate researchers, university faculty and graduates in industry. The editors have made a specific effort to include contributions from those relatively new to the field, which brings in new ideas and perspectives, as well as those more established workers, who bring a wealth of experience.

This new publication in the Models and Modeling in Science Education series synthesizes a wealth of international research on using multiple representations in biology education and aims for a coherent framework in using them to improve higher-order learning. Addressing a major gap in the literature, the volume proposes a theoretical model for advancing biology educators' notions of how multiple external representations (MERs) such as analogies, metaphors and visualizations can best be harnessed for improving teaching and learning in biology at all pedagogical levels. The content tackles the conceptual and linguistic difficulties of learning biology at each level: macro, micro, sub-micro, and symbolic, illustrating how MERs can be used in teaching across these levels and in various combinations, as well as in differing contexts and topic areas. The strategies outlined will help students' reasoning and problem-solving skills, enhance their ability to construct mental models and internal representations, and, ultimately, will assist in increasing public understanding of biology-related issues, a key goal in today's world of pressing concerns over societal problems about food, environment, energy, and health. The book concludes by highlighting important aspects of research in biological education in the post-genomic, information age.

In addition to covering thoroughly the core areas of physical organic chemistry - structure and mechanism - this book will escort the practitioner of organic chemistry into a field that has been thoroughly updated.

Part A: Structure and Mechanisms

Reconstruction of Wave-Particle Duality and its Implications for General Chemistry Textbooks

Ceiling to Floor Savings

Understanding Our World of Atoms and Molecules

Principles and Practice

Named a Doody's Core Title in 2012 and 2013! Widely acknowledged as the cornerstone reference in the field, Pediatric Rehabilitation brings together renowned specialists from all sectors of the pediatric rehabilitation community to provide the most current and comprehensive information available. The fifth edition has been substantially updated and expanded with evidence-based discussions of new theories, therapies, interventions, research findings, and controversies. Five completely new chapters focus on such emerging areas as the use of ultrasound to guide motor point and nerve injections, rehabilitation of chronic pain and conversion disorders, management of concussions, sports injuries, and neurodegenerative and demyelinating diseases in children. This edition also addresses important new directions in genetic markers and tests, cognitive, developmental, and neuropsychological assessment, and rehabilitation for common genetic conditions. Additionally, several new contributors provide fresh perspectives to the voices of established leaders in the field. The text covers all aspects of pediatric rehabilitation medicine from basic examination and testing to electrodiagnosis, therapeutic exercise, orthotics and assistive devices, gait labs, aging with pediatric onset disability, and in-depth clinical management of the full range of childhood disabilities and injuries. iPearls and Perils featured throughout the book underscore crucial information, and illustrations, summary tables, information boxes, and lists contribute to the text's abundant clinical utility. New to the Fifth Edition: Every chapter has been thoroughly revised and expanded to reflect current thinking and practice Evidence-based discussions of new theories, therapies, interventions, research findings, and areas of controversy Five entirely new chapters illuminating emerging areas: rehabilitation of chronic pain and conversion disorders, ultrasound-guided injections, concussion management, sports injuries, and neurodegenerative and demyelinating diseases in children

NOTE: You are purchasing a standalone product; MasteringA&P does not come packaged with this content. If you would like to purchase both the physical text and MasteringA&P search for ISBN-10: 0321940873/ISBN-13: 9780321940872 . That package includes ISBN-10: 0321943171/ISBN-13: 9780321943170 and ISBN-10: 013389178X/ISBN-13: 9780133891782. " For two-semester general chemistry courses (science majors)." " "Make critical connections in chemistry clear and visibleMcMurry/Fay/Robinson's "Chemistry," Seventh Edition, aims to help students understand the connections between topics in general chemistry and why they matter. The Seventh Edition provides a concise and streamlined narrative that blends the quantitative and visual aspects of chemistry, demonstrates the connections between topics, and illustrates the application of chemistry to their lives and careers. New content offers a better bridge between organic and biochemistry and general chemistry content, and new and improved pedagogical features make the text a true teaching tool rather than just a reference book. New MasteringChemistry features include conceptual worked examples and integrated Inquiry sections that help make critical connections clear and visible and increase students' understanding of chemistry. The Seventh Edition fully integrates the text with new MasteringChemistry content and functionality to support the learning process before, during, and after class. Also Available with MasteringChemistry(R).MasteringChemistry from Pearson is the leading online homework, tutorial, and assessment system, designed to improve results by engaging students before, during, and after class with powerful content. Instructors ensure students arrive ready to learn by assigning educationally effective content before class, and encourage critical thinking and retention with in-class resources such as Learning Catalytics. Students can further master concepts after class through traditional and adaptive homework assignments that provide hints and answer-specific feedback. The Mastering gradebook records scores for all automatically graded assignments in one place, while diagnostic tools give instructors access to rich data to assess student understanding and misconceptions. Mastering brings learning full circle by continuously adapting to each student and making learning more personal than ever-before, during, and after class.

General Chemistry: Atoms First , Second Edition starts from the building blocks of chemistry, the atom, allowing the authors to tell a cohesive story that progresses logically through molecules and compounds to help students intuitively follow complex concepts more logically. This unified thread of ideas helps students build a better foundation and ultimately gain a deeper understanding of chemical concepts. Students can more easily understand the microscopic-to-macroscopic connections between unobservable atoms and the observable behavior of matter in daily life, and are brought immediately into real chemistry--instead of being forced to memorize facts. Reflecting a true atoms first perspective, the Second Edition features experienced atoms-first authors, incorporates recommendations from a panel of atoms-first experts, and follows historical beliefs in teaching chemistry concepts based and real experimental data first. This approach distinguishes this text in the market based whereby other authors teach theory first, followed by experimental data.

ChemistryPrentice Hall

Chemistry

Cheaper, Greener, Cleaner

Pediatric Rehabilitation, Fifth Edition

Sam Walton

Advanced Organic Chemistry