

Sapling Learning Answers General Chemistry Chapters

The gold standard in analytical chemistry, Dan Harris' Quantitative Chemical Analysis provides a sound physical understanding of the principles of analytical chemistry and their applications in the disciplines.

Our high school chemistry program has been redesigned and updated to give you students the right balance of concepts and applications in a program that provides more active learning, more real-world connections, and more engaging content. A revised and enhanced text, designed especially for high school, helps students actively develop and apply their understanding of chemical concepts. Hands-on labs and activities emphasize cutting-edge applications and help students connect concepts to the real world. A new, captivating design, clear writing style, and innovative technology resources support your students in getting the most out of their textbook. - Publisher.

Interactive General Chemistry Achieve, 1-term Access Code

Chemistry can be a daunting subject for the uninitiated, and all too often, introductory textbooks do little to make students feel at ease with the complex subject matter. Basic Chemistry Concepts and Exercises brings the wisdom of J. Kenkel's more than 35 years of teaching experience to communicate the fundamentals of chemistry in a practical, down-to-earth manner. Using conversational language and logically assembled graphics, the book concisely introduces each topic without overwhelming students with unnecessary detail. Example problems and end-of-chapter questions emphasize repetition of concepts preparing students to become adept at the basics before they progress to an advanced general chemistry course. Enhanced with visualization techniques such as the first chapter's mythical microscope, the book clarifies challenging, abstract ideas and stimulates curiosity into what can otherwise be an overwhelming topic. Topics discussed in this reader-friendly text include: Properties and structure of matter Atoms, molecules, and compounds The Periodic Table Atomic weight, formula weights, and moles Gases and solutions Chemical equilibrium Acids, bases, and pH Organic chemicals The appendix contains answers to the homework exercises so students can check their work and receive instant feedback as to whether they have adequately grasped the concepts before moving on to the next section. Designed to help students embrace chemistry not with trepidation, but with confidence, this solid preparatory text forms a firm foundation for more advanced chemistry training.

Laboratory Safety for Chemistry Students

Loose-leaf Version for Environmental Science for a Changing World (Canadian Edition)

Achieve for Interactive General Chemistry Twelve-months Access

Periodic Table Advanced

Explore Biology for the AP[®] Course, a textbook program designed expressly for AP[®] teachers and students by veteran AP[®] educators. Biology for the AP[®] Course provides content organized into modules aligned to the CED, AP[®] skill-building instruction and practice, stunning visuals, and much more.

Environmental Science for a Changing World captivates students with real-world stories while exploring the science concepts in context. Engaging stories plus vivid photos and infographics make the content relevant and visually enticing. The result is a text that emphasizes environmental, scientific, and information literacies in a way that engages students.

Introductory Chemistry creates light bulb moments for students and provides unrivaled support for instructors! Highly visual, interactive multimedia tools are an extension of Kevin Revell's distinct author voice and help students develop critical problem solving skills and master foundational chemistry concepts necessary for success in chemistry.

easy equilibrium equation

Chemistry 2e

The Basic Practice of Statistics

An Integrated Approach

Achieve for Essentials of General, Organic, and Biochemistry 2-term Access

Loose-Leaf Version for Chemical Principles

Silberberg's Principles of General Chemistry offers students the same authoritative topic coverage as its parent text, Chemistry: The Molecular Nature of Matter and Change. The Principles text allows for succinct coverage of content with minimal emphasis on pedagogic learning aids. This more streamlined approach to learning appeals to today's efficiency-minded, value-conscious instructors and students without sacrificing depth, clarity, or rigor.

Each experiment in this manual was selected to match topics in your textbook and includes an introduction, a procedure, a page of pre-lab exercises about the concepts the lab illustrates, and a report form. Some have a scenario that places the experiment in a real-world context. For this edition, minor updates have been made to the lab manual to address some safety concerns.

This supplement, prepared by Mary Kay Orgill of the University of Nevada, Las Vegas, contains detailed solutions and explanations for all problems in the main text that have colored numbers.

The ultimate reference tool and lab partner for any student of science, durably laminated, authored and designed to fit as much info as possible in this handy 6-page format.

Separate property tables are broken out for the ease of locating trends while studying and working while other pages offer essential notes about the table's organization and history. Consistently, a best seller since its first creation, the lamination means you will have it for life and it can survive through chem lab. Topics covered include: 11 by 17 Inch Sized Periodic Table Extensive Properties Per Element on the Main Table Color

*Coded Diagram of a Table Square Defining Properties Major Families of Elements
Biochemical Periodic Table Example of Long Version Table Periodic Trend Tables:
Electronegativity Atomic Radius 1st Ionization Potential Electron Affinity Chemical
Properties & Common Uses Major Natural Isotopes with Percentage of Occurrence
Principles of General Chemistry*

The Central Science

Life

Loose-leaf Version for Introductory Chemistry

The Most Dangerous Game

Authoritative, thorough, and engaging, *Life: The Science of Biology* achieves an optimal balance of scholarship and teachability, never losing sight of either the science or the student. The first introductory text to present biological concepts through the research that revealed them, *Life* covers the full range of topics with an integrated experimental focus that flows naturally from the narrative. This approach helps to bring the drama of classic and cutting-edge research to the classroom - but always in the context of reinforcing core ideas and the innovative scientific thinking behind them. Students will experience biology not just as a litany of facts or a highlight reel of experiments, but as a rich, coherent discipline. *A Concise Introduction to General, Organic, and Biological Chemistry* General, Organic, and Biological Chemistry strengthens the evidenced strategy of integrating general, organic, and biological chemistry for a focused introduction to the fundamental connections between chemistry and life. The streamlined approach offers readers a clear path through the content over a single semester. The Third Edition integrates essential topics more effectively than any text on the market, covering core concepts in each discipline in just 12 comprehensive chapters. Practical connections and applications show readers how to use their understanding of chemistry in everyday life and future health professions. With an emphasis on problem solving and critical thinking, the book promotes active and attentive learning, which now include NEW! media assets, *Practicing the Concepts*. Featuring coauthor Todd Deal, these 3 to 5 minute videos explore key concepts in general, organic, and biological chemistry that readers traditionally find difficult. Readers gain skills and deepen their knowledge as they watch the videos and then practice what they have learned with *Pause & Predict* problems and a series of follow up multiple-choice questions. The Third Edition places a greater emphasis on matching what professors teach in the classroom by increasing the coverage of biochemical applications in each chapter. A new design was created to highlight the career content in order to increase relevancy. Also available as a Pearson eText or packaged with Mastering Chemistry Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience that can be adopted on its own as the main course material. It lets students highlight, take notes, and review key vocabulary all in one place, even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need, when they need it. Educators can

easily share their own notes with students so they see the connection between their eText and what they learn in class - motivating them to keep reading, and keep learning. Mastering combines trusted author content with digital tools and a flexible platform to personalize the learning experience and improve results for each student. Built for, and directly tied to the text, Mastering Chemistry enables an extension of learning, allowing students a platform to practice, learn, and apply outside of the classroom. Note: You are purchasing a standalone book; Pearson eText and Mastering Chemistry do not come packaged with this content. Students, ask your instructor for the correct package ISBN and Course ID.

Instructors, contact your Pearson representative for more information. If your instructor has assigned Pearson eText as your main course material, search for: • 0135237327 / 9780135237328 Pearson eText General, Organic, and Biological Chemistry, 3/e -- Access Card OR • 0135237335 / 9780135237335 Pearson eText General, Organic, and Biological Chemistry, 3/e -- Instant Access If you would like to purchase both the physical text and MasteringChemistry, search for: 0134041569/9780134041568 General, Organic, and Biological Chemistry Plus MasteringChemistry with eText -- Access Card Package, 3/e Package consists of: 0134162048 / 9780134162041 MasteringChemistry with Pearson eText -- ValuePack Access Card -- for General, Organic, and Biological Chemistry 0134042425 / 9780134042428 General, Organic, and Biological Chemistry, 3/e Discover motivating, personalized learning strategies that all of your students will love! Build an active, responsive, and inclusive classroom where every student benefits. Through step-by-step directions, reproducible handouts, classroom-tested examples, and specific guidelines, teachers and teacher teams will discover 60 activities to help you: Quickly and easily modify and adapt design instruction for diverse learners, including students with cultural, language, learning, physical, or sensory differences Transform lectures and whole-class discussions through dynamic, student-centered learning experiences Immerse students in discussion, debate, creative thinking, questioning, teamwork, and collaborative learning Flexibly co-plan and co-teach with a variety of school professionals

A Unified Curriculum. Written to Stick. Introductory Chemistry was developed to take advantage of a digital environment within Sapling Learning to create a more visual, interactive experience for students learning introductory chemistry and to provide a wealth of resources to support various teaching styles. Both the print and digital resources were designed from the ground up and in parallel to create a flexible teaching and learning experience. Learn It Kevin Revell understands the student audience and knows how to draw them in with an accessible narrative. By using simple, straightforward language, Revell presents Introductory Chemistry in a way that is welcoming and attainable for all students. Throughout both the text and digital tools, material is broken into achievable steps and students are given the support, guidance and reinforcement necessary to successfully learn Introductory Chemistry concepts. Know it Introductory

Chemistry introduces students to chemistry with a uniquely engaging writing style that not only promotes understanding but uses devices like storytelling and analogies to also help students learn at a deeper level and retain concepts. Interactive activities give students a way to work through online tutorials for targeted, hands-on practice with the most difficult concepts in the course and provide a foundation for conceptual understanding and problem solving skills. Moving from comprehension to retention, students solidify their understanding of material to the point where they just "know it". This in turn helps build on concepts as they move forward through the course and continue to grow their ability to solve more complex problems. Own It Written and developed as an integrated print and digital resource, Introductory Chemistry was designed to serve as a teaching and learning tool to meet instructors and students where they are today and provide support and tools tailored to various teaching styles. Instructors interested in incorporating active learning into their classrooms will find resources to make this an easy transition. Those who already subscribe to active learning techniques will find tools to complement their efforts. Students will also find support for diverse learning styles and can take advantage of learning through the printed narrative and pedagogy, eBook and interactive digital tools, or a combination of both. Students can choose to access the content in the learning environment that best fits their needs: the printed narrative and pedagogy, the eBook and interactive digital tools, the video lecture modules, or a combination. The content and approach of each environment includes the full Introductory Chemistry experience.

Quantitative Chemical Analysis

Lab Manual Experiments in General Chemistry

Interactive General Chemistry

Essentials of General, Organic, and Biochemistry

Organic Chemistry

An unparalleled classic, the sixth edition of Silberberg Chemistry keeps pace with the evolution of student learning. The text maintains unprecedented macroscopic-to-microscopic molecular illustrations, consistent step-by-step worked exercises in every chapter, and extensive range of end-of-chapter problems with engaging applications covering a wide variety of interests, including engineering, medicine, materials, and environmental studies. Changes have been made to the text and applications throughout to make them more succinct, to the artwork to make it more teachable and modern, and to the design to make it more modern, simplistic, and open. Features include Three-Level Depictions of Chemical Scenes are the focus of Silberberg's ground-breaking art program, which combines photographs of chemical scenes with an illustrated molecular view and with the equation that symbolically and quantitatively describes that scenario. McGraw-Hill's Connect Chemistry allows teachers to

deliver assignments, quizzes, and tests online. Over 2,200 end of chapter problems and additional problems are available to assign. Teachers can edit questions, write new problems, and track student performance.

"University Physics is a three-volume collection that meets the scope and sequence requirements for two- and three-semester calculus-based physics courses. Volume 1 covers mechanics, sound, oscillations, and waves. This textbook emphasizes connections between theory and application, making physics concepts interesting and accessible to students while maintaining the mathematical rigor inherent in the subject. Frequent, strong examples focus on how to approach a problem, how to work with the equations, and how to check and generalize the result."--Open Textbook Library.

"Atoms First seems to be the flavor of the year in chemistry textbooks, but many of them seem to be little more than rearrangement of the chapters. It takes a master like McQuarrie to go back to the drawing board and create a logical development from smallest to largest that makes sense to students."---Hal Harris, University of Missouri-St. Louis "McQuarrie's book is extremely well written, the order of topics is logical, and it does a great job with both introductory material and more advanced concepts. Students of all skill levels will be able to learn from this book."--Mark Kearley, Florida State University

This new fourth edition of General Chemistry takes an atoms-first approach from beginning to end. In the tradition of McQuarrie's many previous works, it promises to be another ground-breaking text. This superb new book combines the clear writing and wonderful problems that have made McQuarrie famous among chemistry professors and students worldwide. Presented in an elegant design with all-new illustrations, it is available in a soft-cover edition to offer professors a fresh choice at an outstanding value. Student supplements include an online series of descriptive chemistry Interchapters, a Student Solutions Manual, and an optional state-of-the-art Online Homework program. For adopting professors, an Instructor's Manual and a CD of the art are also available.

?? The Most Dangerous Game by Richard Connell ?? The Most Dangerous Game, also published as The Hounds of Zaroff, is a short story by Richard Connell first published in Collier's magazine on January 19, 1924. It features a big-game hunter from New York who falls off a yacht and swims to an isolated island in the Caribbean where he is hunted by a Cossack aristocrat. The story is an adaptation of the big-game hunting safaris in Africa and South America that were fashionable among wealthy Americans in the 1920s. ?? The Most Dangerous Game by Richard Connell ??

Big-game hunter Sanger Rainsford and his friend, Whitney, are traveling to the Amazon rainforest for a jaguar hunt. After a discussion about how they are "the hunters" instead of "the hunted," Whitney goes to bed and Rainsford hears gunshots. He climbs onto the yacht's rail and accidentally falls overboard, swimming to Ship-Trap Island, which is notorious for shipwrecks. On the island, he finds a palatial chateau inhabited by two Cossacks: the owner, General Zaroff, and his gigantic deaf-mute servant, Ivan. ?? The Most Dangerous Game by Richard Connell ?? Zaroff, another big-game hunter, knows of Rainsford from his published account of hunting snow leopards in Tibet. Over dinner, the middle-aged Zaroff explains that although he has been hunting animals since he was a boy, he has decided that killing big-game has become boring for him, so after escaping the Russian Revolution he moved to Ship-Trap Island and set it up to trick ships into wrecking themselves on the jagged rocks that surround it. He takes the survivors captive and hunts them for sport, giving them food, clothing, a knife, and a three-hour head start, and using only a small-caliber pistol for himself. Any captives who can elude Zaroff, Ivan, and a pack of hunting dogs for three days are set free. He reveals that he has won every hunt to date. Captives are offered a choice between being hunted or turned over to Ivan, who once served as official knouter for The Great White Czar. Rainsford denounces the hunt as barbarism, but Zaroff replies by claiming that "life is for the strong." Realizing he has no way out, Rainsford reluctantly agrees to be hunted. During his head start, Rainsford lays an intricate trail in the forest and then climbs a tree. Zaroff finds him easily, but decides to play with him as a cat would with a mouse, standing underneath the tree Rainsford is hiding in, smoking a cigarette, and then abruptly departing. ?? The Most Dangerous Game by Richard Connell ?? After the failed attempt at eluding Zaroff, Rainsford builds a Malay man-catcher, a weighted log attached to a trigger. This contraption injures Zaroff's shoulder, causing him to return home for the night, but he shouts his respect for the trap before departing. The next day Rainsford creates a Burmese tiger pit, which kills one of Zaroff's hounds. He sacrifices his knife and ties it to a sapling to make another trap, which kills Ivan when he stumbles into it. To escape Zaroff and his approaching hounds, Rainsford dives off a cliff into the sea; Zaroff, disappointed at Rainsford's apparent suicide, returns home. Zaroff smokes a pipe by his fireplace, but two issues keep him from the peace of mind: the difficulty of replacing Ivan and the uncertainty of whether Rainsford perished in his dive.

Silberberg, Chemistry (NASTA Reinforced Binding High School)

Structure and Function

World of Chemistry

University Physics

Chemistry: An Atoms First Approach

This 6-page study guide contains basic chemistry analysis and concepts designed specifically to aid science students.

"Chemistry is designed for the two-semester general chemistry course. For many students, this course provides the foundation to a career in chemistry, while for others, this may be their only college-level science course. As such, this textbook provides an important opportunity for students to learn the core concepts of chemistry and understand how those concepts apply to their lives and the world around them. The text has been developed to meet the scope and sequence of most general chemistry courses. At the same time, the book includes a number of innovative features designed to enhance student learning. A strength of Chemistry is that instructors can customize the book, adapting it to the approach that works best in their classroom."--Openstax College website.

"...this substantial and engaging text offers a wealth of practical (in every sense of the word) advice...Every undergraduate laboratory, and, ideally, every undergraduate chemist, should have a copy of what is by some distance the best book I have seen on safety in the undergraduate laboratory." Chemistry World, March 2011 Laboratory Safety for Chemistry Students is uniquely designed to accompany students throughout their four-year undergraduate education and beyond, progressively teaching them the skills and knowledge they need to learn their science and stay safe while working in any lab. This new principles-based approach treats lab safety as a distinct, essential discipline of chemistry, enabling you to instill and sustain a culture of safety among students. As students progress through the text, they'll learn about laboratory and chemical hazards, about routes of exposure, about ways to manage these hazards, and about handling common laboratory emergencies. Most importantly, they'll learn that it is very possible to safely use hazardous chemicals in the laboratory by applying safety principles that prevent and minimize exposures. Continuously Reinforces and Builds Safety Knowledge and Safety Culture Each of the book's eight chapters is organized into three tiers of sections, with a variety of topics suited to beginning, intermediate, and advanced course levels. This enables your students to gather

relevant safety information as they advance in their lab work. In some cases, individual topics are presented more than once, progressively building knowledge with new information that's appropriate at different levels. A Better, Easier Way to Teach and Learn Lab Safety We all know that safety is of the utmost importance; however, instructors continue to struggle with finding ways to incorporate safety into their curricula.

Laboratory Safety for Chemistry Students is the ideal solution: Each section can be treated as a pre-lab assignment, enabling you to easily incorporate lab safety into all your lab courses without building in additional teaching time. Sections begin with a preview, a quote, and a brief description of a laboratory incident that illustrates the importance of the topic. References at the end of each section guide your students to the latest print and web resources. Students will also find "Chemical Connections" that illustrate how chemical principles apply to laboratory safety and "Special Topics" that amplify certain sections by exploring additional, relevant safety issues. Visit the companion site at

<http://userpages.wittenberg.edu/dfinster/LSCS/>.

Steve and Susan Zumdahl's texts focus on helping students build critical thinking skills through the process of becoming independent problem-solvers. They help students learn to think like a chemists so they can apply the problem solving process to all aspects of their lives. In CHEMISTRY: AN ATOMS FIRST APPROACH, the Zumdahls use a meaningful approach that begins with the atom and proceeds through the concept of molecules, structure, and bonding, to more complex materials and their properties. Because this approach differs from what most students have experienced in high school courses, it encourages them to focus on conceptual learning early in the course, rather than relying on memorization and a plug and chug method of problem solving that even the best students can fall back on when confronted with familiar material. The atoms first organization provides an opportunity for students to use the tools of critical thinkers: to ask questions, to apply rules and models and to evaluate outcomes. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

equilibrium

General, Organic, and Biological Chemistry

Student Solutions Manual for Silberberg Chemistry: The Molecular Nature of Matter and Change

The Quest for Insight Achieve for Essentials of General, Organic, and Biochemistry 1-term Access

"The fourteenth edition continues a long tradition of providing a firm foundation in the concepts of chemical principles while instilling an appreciation of the important role chemistry plays in our daily lives. We believe that it is our responsibility to assist both instructors and students in their pursuit of this goal by presenting a broad range of chemical topics in a logical format. At all times, we strive to balance theory and application and to illustrate principles with applicable examples whenever possible"--

The Basic Practice of Statistics has become a bestselling textbook by focusing on how statistics are gathered, analyzed, and applied to real problems and situations—and by confronting student anxieties about the course's relevance and difficulties head on. With David Moore's pioneering "data analysis" approach (emphasizing statistical thinking over computation), engaging narrative and case studies, current problems and exercises, and an accessible level of mathematics, there is no more effective textbook for showing students what working statisticians do and what accurate interpretations of data can reveal about the world we live in. In the new edition, you will once again see how everything fits together. As always, Moore's text offers balanced content, beginning with data analysis, then covering probability and inference in the context of statistics as a whole. It provides a wealth of opportunities for students to work with data from a wide range of disciplines and real-world settings, emphasizing the big ideas of statistics in the context of learning specific skills used by professional statisticians. Thoroughly updated throughout, the new edition offers new content, features, cases, data sources, and exercises, plus new media support for instructors and students—including the latest version of the widely-adopted StatsPortal. The full picture of the contemporary practice of statistics has never been so captivatingly presented to an uninitiated audience.

NOTE: This edition features the same content as the traditional text in a convenient, three-hole-punched, loose-leaf version. Books a la Carte also offer a great value; this format costs significantly less than a new textbook. Before purchasing, check with your instructor or review your course syllabus to ensure that you select the correct ISBN. Several versions of MyLab(tm) and Mastering(tm) platforms exist for each title, including customized versions for individual schools, and registrations are not transferable. In addition, you may need a Course ID, provided by your instructor, to register for and use

MyLab and Mastering products. For courses in two-semester general chemistry. Accurate, data-driven authorship with expanded interactivity leads to greater student engagement. Unrivaled problem sets, notable scientific accuracy and currency, and remarkable clarity have made Chemistry: The Central Science the leading general chemistry text for more than a decade. Trusted, innovative, and calibrated, the text increases conceptual understanding and leads to greater student success in general chemistry by building on the expertise of the dynamic author team of leading researchers and award-winning teachers. In this new edition, the author team draws on the wealth of student data in Mastering(tm)Chemistry to identify where students struggle and strives to perfect the clarity and effectiveness of the text, the art, and the exercises while addressing student misconceptions and encouraging thinking about the practical, real-world use of chemistry. New levels of student interactivity and engagement are made possible through the enhanced eText 2.0 and Mastering Chemistry, providing seamlessly integrated videos and personalized learning throughout the course. Also available with Mastering Chemistry Mastering(tm) Chemistry is the leading online homework, tutorial, and engagement system, designed to improve results by engaging students with vetted content. The enhanced eText 2.0 and Mastering Chemistry work with the book to provide seamless and tightly integrated videos and other rich media and assessment throughout the course. Instructors can assign interactive media before class to engage students and ensure they arrive ready to learn. Students further master concepts through book-specific Mastering Chemistry assignments, which provide hints and answer-specific feedback that build problem-solving skills. With Learning Catalytics(tm) instructors can expand on key concepts and encourage student engagement during lecture through questions answered individually or in pairs and groups. Mastering Chemistry now provides students with the new General Chemistry Primer for remediation of chemistry and math skills needed in the general chemistry course. If you would like to purchase both the loose-leaf version of the text and MyLab and Mastering, search for: 0134557328 / 9780134557328 Chemistry: The Central Science, Books a la Carte Plus MasteringChemistry with Pearson eText -- Access Card Package Package consists of: 0134294165 / 9780134294162 MasteringChemistry with Pearson eText -- ValuePack Access Card -- for Chemistry: The Central Science 0134555635 / 9780134555638 Chemistry: The Central Science, Books a la Carte Edition

Concepts of Biology is designed for the single-semester introduction to biology course for non-science majors, which for

many students is their only college-level science course. As such, this course represents an important opportunity for students to develop the necessary knowledge, tools, and skills to make informed decisions as they continue with their lives. Rather than being mired down with facts and vocabulary, the typical non-science major student needs information presented in a way that is easy to read and understand. Even more importantly, the content should be meaningful. Students do much better when they understand why biology is relevant to their everyday lives. For these reasons, Concepts of Biology is grounded on an evolutionary basis and includes exciting features that highlight careers in the biological sciences and everyday applications of the concepts at hand. We also strive to show the interconnectedness of topics within this extremely broad discipline. In order to meet the needs of today's instructors and students, we maintain the overall organization and coverage found in most syllabi for this course. A strength of Concepts of Biology is that instructors can customize the book, adapting it to the approach that works best in their classroom. Concepts of Biology also includes an innovative art program that incorporates critical thinking and clicker questions to help students understand--and apply--key concepts.

Organic chemistry

Chemistry

*Study Guide and Solutions Manual to Accompany Organic Chemistry
Active and Collaborative Strategies for Inclusive Classrooms
Developing Representations of Concepts, Conceptual Structure and
Conceptual Change to Inform Teaching and Research*

Interactive General Chemistry meets students where they are...with a general chemistry program designed for the way students learn. Achieve provides a new platform for Interactive General Chemistry, thoughtfully developed to engage students for better outcomes. Powerful data and analytics provide instructors with actionable insights on a platform that allows flexibility to align with a broad variety of teaching and learning styles and the exciting Interactive General Chemistry program! Whether a student's learning path starts with problem solving or with reading, Interactive General Chemistry delivers the learning experience he or she needs to succeed in general chemistry. Built from the ground up as a digital learning program, Interactive General Chemistry combines the Sapling Learning homework platform with a robust e-book with seamlessly embedded, multimedia-rich learning resources. This flexible learning environment helps students effectively and efficiently tackle chemistry concepts and problem solving. Student-centered development In addition to Macmillan's standard rigorous peer review process, student involvement was critical to the development and design of Interactive General Chemistry. Using extensive research on student study behavior and data collection on the resources and tools that most effectively promote understanding, we crafted this complete course solution to intentionally embrace the way that students learn. Digital-first experience Interactive General Chemistry was built from the ground up to take full advantage of the digital learning environment. High-quality multimedia resources--including Sapling interactives, PhET simulations, and new whiteboard videos by Tyler DeWitt--are seamlessly integrated into a streamlined, uncluttered e-book. Embedded

links provide easy and efficient navigation, enabling students to link to review material and definitions as needed. Problems drive purposeful study Our research into students' study behavior showed that students learn best by doing--so with Interactive General Chemistry, homework problems are designed to be a front door for learning. Expanding upon the acclaimed Sapling homework--where every problem contains hints, targeted feedback, and detailed step-by-step solutions--embedded resources link problems directly to the multimedia-rich e-book, providing just-in-time support at the section and chapter level.

Written for calculus-inclusive general chemistry courses, Chemical Principles helps students develop chemical insight by showing the connections between fundamental chemical ideas and their applications. Unlike other texts, it begins with a detailed picture of the atom then builds toward chemistry's frontier, continually demonstrating how to solve problems, think about nature and matter, and visualize chemical concepts as working chemists do. It also offers an exceptional level of support to help students develop their mathematical and problem-solving skills. For the new edition, Chemical Principles now takes a modular approach, with coverage organized as a series of brief Topics within 13 major areas of focus, including a refresher on the fundamentals of chemistry and an online-only section on techniques.

This remarkably engaging textbook gives biology students an introduction to statistical practice all their own. It covers essential statistical topics with examples and exercises drawn from across the life sciences, including the fields of nursing, public health, and allied health. Based on David Moore's *The Basic Practice of Statistics*, PSLS mirrors that #1 bestseller's signature emphasis on statistical thinking, real data, and what statisticians actually do. The new edition includes new and updated exercises, examples, and samples of real data, as well as an expanded range of media tools for students and instructors.

This book sets out the necessary processes and challenges involved in modeling student thinking, understanding and learning. The chapters look at the centrality of models for knowledge claims in science education and explore the modeling of mental processes, knowledge, cognitive development and conceptual learning. The conclusion outlines significant implications for science teachers and those researching in this field. This highly useful work provides models of scientific thinking from different field and analyses the processes by which we can arrive at claims about the minds of others. The author highlights the logical impossibility of ever knowing for sure what someone else knows, understands or thinks, and makes the case that researchers in science education need to be much more explicit about the extent to which research onto learners' ideas in science is necessarily a process of developing models. Through this book we learn that research reports should acknowledge the role of modeling and avoid making claims that are much less tentative than is justified as this can lead to misleading and sometimes contrary findings in the literature. In everyday life we commonly take it for granted that finding out what another knows or thinks is a relatively trivial or straightforward process. We come to take the 'mental register' (the way we talk about the 'contents' of minds) for granted and so teachers and researchers may readily underestimate the challenges involved in their work.

Joyful Learning

Basic Chemistry Concepts and Exercises

Biology for the AP® Course

The Science of Biology

I Clicker 2 Student Remote