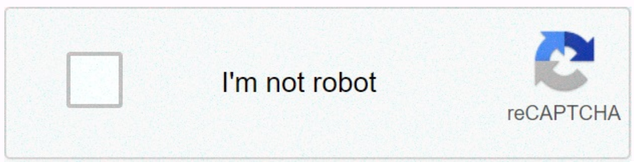

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Karen Timberlake is Professor Emerita of Chemistry at Los Angeles Valley College, where she taught chemistry for allied health and preparatory chemistry for 36 years. She received her bachelor's degree in chemistry from the University of Washington and her master's degree in biochemistry from the University of California, Los Angeles. Professor Timberlake has been writing chemistry textbooks for more than 40 years. During that time, her name has been associated with the strategic use of educational tools that promote student success in chemistry and the application of chemistry to real-world situations. More than a million students have learned chemistry using texts, laboratory manuals and study guides written by Karen Timberlake. In addition to Basic Chemistry, sixth edition, she is also the author of general, organic and biological chemistry: Structures of Life, sixth edition, with the accompanying study guidance and chemistry: An introduction to general, organic and biological chemistry, thirteenth edition, with the accompanying study guide and selected solutions manual, Laboratory Manual and Essential Laboratory Manual. Professor Timberlake belongs to a number of scientific and educational organizations, including the American Chemical Society (ACS) and the National Science Teachers Association (NSTA). She has been the Western Regional Winner of Excellence in College Chemistry Teaching Award given by the Chemical Manufacturers Association. She received the McGuffey Award in Physical Sciences from the Textbook Authors Association for her textbook chemistry: An introduction to general, organic and biological chemistry, eighth edition. She received the Texty Textbook Excellence Award from the Textbook Authors Association for the first edition of Basic Chemistry. She has participated in education grants for science education, including the Los Angeles Collaborative for Teaching Excellence (LACTE) and a Title III scholarship at her college. She speaks at conferences and educational meetings about the use of student-centered teaching methods in chemistry to promote student learning success. Her husband, William Timberlake, who is a co-author of this text, is Professor Emeritus of Chemistry at Los Angeles Harbor College, where he taught preparatory and organic chemistry for 36 years. He received his bachelor's degree in chemistry from Carnegie Mellon University and his master's degree in organic chemistry from the University of California, Los Angeles. When professors Timberlake doesn't write textbooks, they relax by playing tennis, ballroom dancing, hiking, traveling, trying new restaurants, cooking and enjoying grandchildren Daniel and Emily. For courses in initial, preparatory and basic chemistry. This package includes mastering chemistry. Help students master mathematics and problem solving they will use in the future Classes Basic Chemistry introduces introductory chemistry students to the essential scientific and mathematical concepts of general chemistry while providing the scaffolding support they need. The text uses accessible language and a moderate pace to provide an easy-to-follow approach for first-time chemistry students and those hoping to renew their study of chemistry. With Basic Chemistry, Bill and Karen Timberlake make the study of chemistry an engaging and positive experience for today's students by relating the structure and behavior of the matter to real life. The text's applied focus helps students connect chemistry to their interests and potential careers through applications related to real-world topics in health, the environment and medicine. The new edition strengthens its emphasis on problem solving with additional end-of-chapter Challenge problems and new assignable practice problems that ensure students the basic quantitative skills and conceptual understanding needed to succeed in this course and to continue their studies in the field. Reach each student by combining this text with Mastering Chemistry Mastering™ is the teaching and learning platform that allows you to reach all students. By combining reliable author content with digital tools designed to engage students and mimic the office-hour experience, Mastering adapts learning and improves outcomes for each student. 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Build students' problem-solving skills Marginal notes, problems at the end of the chapter, and an expanded media program deepen the connection between important mathematical skills and why they are so important for success in the course. New - Educational features in work examples throughout the text help students build stronger problem-solving skills, set them up for success in this and future courses. Updated – The Connect feature added to analyze the problem boxes specifies information that relates the Given and Need sections to help students identify and link the components in a word issue and configure a solution strategy. New - Practice issues appear in the margin, showing students what practice issues match the content and test issues throughout the text. Challenge questions at the end of each chapter provide complex questions that promote critical thinking, group work and collaborative learning environments. New - Extended Study Check questions in each selection issue help students review problem solving strategies and their understanding of the material. Engage students with a more applied focus up to date - Engaging questions reflects research on how students learn and retain information and is designed to help students connect new content to knowledge available in long-term memory. Students succeed when they are constantly asked for new material, which practices retrieving new information. Self-tests appear in the margin. Updated - Chemistry Links to health and chemistry Links to the environment are displayed throughout the text and relate chemistry concepts to real topics in health, environment and medicine that interest students. Topics include weight loss and weight gain, hyperglycaemia and hypoglycaemia, antacids, gout and kidney stones, sweetening clock, and essential amino acids. Follow-up questions are also displayed in the full text. Increase student understanding with the updated art program Updated - The art program presents chemical art that is now more understandable than ever before by incorporating good educational principles and the best learning design principles from educational research on how today's students learn and retain knowledge. In-art captions replace long legends, and the flow and size of art has been updated to improve students' understanding. allows students to relationships between recognizable objects and their representations at the atomic level, helping them visualize chemistry in everyday life. Reach all students with Mastering Teach your way: Your course is unique. So whether you want to build your own automatically graded assignments, promote student engagement during class, or give students anytime, anywhere, access, Mastering gives you the flexibility to easily create your course to suit your needs. With Learning Catalytics, you will hear from every student when it matters most. 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Personal learning, including adaptive tools and feedback about incorrect answers, shows the exact areas where each student needs training and provides all students with the support they need—when and where they need it—to succeed. Chemistry primer helps students rectify their chemistry math skills and prepare for their first college chemistry course. Pre-built assignments get students updated at the beginning of the course. Mathematics is covered in the context of chemistry, basic chemical literacy, balancing chemical equations, mole theory, and stoichiometry. Scaled to the needs of students, remediation is only proposed for students who perform poorly on the first grade. Remediation includes training, incorrect responses to specific feedback, video teaching and step-by-step scaffolding to build students' abilities. New - Pearson eText is an easy-to-use, mobile-optimized, personalized reading experience available in mastery. It makes it easy for students to highlight, take notes, and review important vocabulary in one place—even when they're offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need when they need it. Deliver reliable content: We work with highly respected authors to develop interactive content and course-specific resources that keep students on track and engaged. Updated - Interactive videos give students an opportunity to reinforce it just learned by showing how chemistry works in real life introduce some humor into chemical problem solving and demonstrations. Each video corresponds to an important concept/topic in most chapters and includes pause and predict functionality. Topics include the use of conversion factors, mass calculations for reactions, concentration of solutions, balancing nuclear equations and chemical v. Physical change. Sample calculations go through the most challenging chemistry problems and provide a new perspective on how to approach individual problems and plan solutions. Important mathematical skills and core chemistry skills Training guides provide assignable practice problems related to the in-text function boxes, so that students master the basic quantitative and scientific skills they need to succeed in the course. New and up-to-date — Enhanced questions about the end of the response-specific feedback chapter use data collected from all students who use the program to provide feedback specific to each student, where and when they need it. Instead of just giving feedback about the variation right/wrong/try again, Mastering guides students towards the correct final answer without giving the answer away. Improve student performance: As you teach with Mastery, students' performance is often improved. 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