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Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation Christopher B. Field 2012-05-28 This Intergovernmental Panel on Climate Change Special Report (IPCC-SREX) explores the challenge of understanding and managing the risks of climate extremes to advance climate change adaptation. Extreme weather and climate events, interacting with exposed and vulnerable human and natural systems, can lead to disasters. Changes in the frequency and severity of the physical events affect disaster risk, but so do the spatially diverse and temporally dynamic patterns of exposure and vulnerability. Some types of extreme weather and climate events have increased in frequency or magnitude, but populations and assets at risk have also increased, with consequences for disaster risk. Opportunities for managing risks of weather- and climate-related disasters exist or can be developed at any scale, local to international. Prepared following strict IPCC procedures, SREX is an invaluable assessment for anyone interested in climate extremes, environmental disasters and adaptation to climate change, including policymakers, the private sector and academic researchers.

Mathematical Modelling in Education Research and Practice Gloria Ann Stillman 2015-07-20 In this volume cultural, social and cognitive influences on the research and teaching of mathematical modelling are explored from a variety of theoretical and practical perspectives. The authors of the current volume are all members of the International Community of Teachers of Mathematical Modelling and Applications, the peak research body in this field. A distinctive feature of this volume is the high number of authors from South American countries. These authors bring quite a different perspective to modelling than has been showcased in previous books in this series, in particular from a cultural point of view. As well as recent international research, there is a strong emphasis on pedagogical issues including those associated with technology and assessment, in the teaching and learning of modelling. Applications at various levels of education are exemplified. The contributions reflect common issues shared globally and represent emergent or on-going challenges.

Aulton's Pharmaceutics Michael E. Aulton 2013 Pharmaceutics is one of the most diverse subject areas in all of pharmaceutical science. In brief, it is concerned with the scientific and technological aspects of the design and manufacture of dosage forms or medicines. An understanding of pharmaceutics is therefore vital for all pharmacists and those pharmaceutical scientists who are involved with converting a drug or a potential drug into a medicine that can be delivered safely, effectively and conveniently to the patient. Now in its fourth edition, this best-selling textbook in pharmaceutics has been brought completely up to date to reflect the rapid advances in delivery methodologies by eye and injection, advances in drug formulations and delivery methods for special groups (such as children and the elderly), nanomedicine, and pharmacognosy. At the same time the editors have striven to maintain the accessibility of the text for students of pharmacy, preserving the balance between being a suitably pitched introductory text and a clear reflection of the state of the art. provides a logical, comprehensive account of drug design and manufacture includes the science of formulation and drug delivery designed and written for newcomers to the design of dosage forms New to this edition New editor: Kevin Taylor, Professor of Clinical Pharmaceutics, School of Pharmacy, University of London. Twenty-two new contributors. Six new chapters covering parenteral and ocular delivery; design and administration of medicines for the children and elderly; the latest in plant medicines; nanotechnology and nanomedicines, and the delivery of biopharmaceuticals. Thoroughly revised and updated throughout.

Project Management in Practice Samuel J. Mantel 2011 Project Management in Practice, 4th Edition focuses on the technical aspects of project management that are directly related to practice.

Economic and Management Sciences, Grade 8 Marietjie Barnard 2013-07-11 Study & master economic and management sciences grade 8 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in economic and management sciences.

Differentiation in Middle and High School Kristina J. Doubet 2015-07-14 In this one-stop resource for middle and high school teachers, Kristina J. Doubet and Jessica A. Hockett explore how to use differentiated instruction to help students be more successful learners--regardless of background, native language, learning style, motivation, or school savvy. They explain how to * Create a healthy classroom community in which students' unique qualities and needs are as important as the ones they have in common. * Translate curriculum into manageable and meaningful learning goals that are fit to be differentiated. * Use pre-assessment and formative assessment to uncover students' learning needs and tailor tasks accordingly. * Present students with avenues to take in, process, and produce knowledge that appeal to their varied interests and learning profiles. * Navigate roadblocks to implementing differentiation. Each chapter provides a plethora of practical tools, templates, and strategies for a variety of subject areas developed by and for real teachers. Whether you're new to differentiated instruction or looking to expand your repertoire of DI strategies, Differentiation in Middle and High School will show you classroom-tested ways to better engage students and help them succeed every day.

Accounting Questions & Answers Speedy Publishing 2014-08-13 An accounting study guide with questions, and answers is a helpful tool for anyone that is taking an an accounting class. An accounting course book covers topics extensively. With the study guide the person can take the quizzes, and check their answers. The study guide shows which answer is correct. Some study guide books will explain why the other answers is close, but not correct. Once the person takes the quiz on a specific topic. They will find out where their weakness is, and what areas they have to study. The book will help them prepare for class exams, and any professional exams they may take.

Transforming the Workforce for Children Birth Through Age 8 National Research Council 2015-07-23 Children are already

learning at birth, and they develop and learn at a rapid pace in their early years. This provides a critical foundation for lifelong progress, and the adults who provide for the care and the education of young children bear a great responsibility for their health, development, and learning. Despite the fact that they share the same objective - to nurture young children and secure their future success - the various practitioners who contribute to the care and the education of children from birth through age 8 are not acknowledged as a workforce unified by the common knowledge and competencies needed to do their jobs well. Transforming the Workforce for Children Birth Through Age 8 explores the science of child development, particularly looking at implications for the professionals who work with children. This report examines the current capacities and practices of the workforce, the settings in which they work, the policies and infrastructure that set qualifications and provide professional learning, and the government agencies and other funders who support and oversee these systems. This book then makes recommendations to improve the quality of professional practice and the practice environment for care and education professionals. These detailed recommendations create a blueprint for action that builds on a unifying foundation of child development and early learning, shared knowledge and competencies for care and education professionals, and principles for effective professional learning. Young children thrive and learn best when they have secure, positive relationships with adults who are knowledgeable about how to support their development and learning and are responsive to their individual progress. Transforming the Workforce for Children Birth Through Age 8 offers guidance on system changes to improve the quality of professional practice, specific actions to improve professional learning systems and workforce development, and research to continue to build the knowledge base in ways that will directly advance and inform future actions. The recommendations of this book provide an opportunity to improve the quality of the care and the education that children receive, and ultimately improve outcomes for children.

Study and Master Physical Science Grade 11 `Teacher's Guide Karin H. Kelder 2006-09-01 Study & Master Physical Sciences Grade 11 takes a fresh and innovative look at the world around us and links science to our everyday lives. All case studies and information on specialised fields, companies and institutions were personally researched by the author and verified by experts in those fields, companies and institutions.

Contemporary Management Principles Vrba M J Brevis Tersia 2014-05-14

Immunization in Practice World Health Organization 2015 This practical guide contains seven modules targeted at district and health facility staff. It intends to meet the demands to improve immunization services so as to reach more infants in a sustainable way, building upon the experiences of polio eradication. It includes materials adapted from polio on planning, monitoring and use of data to improve the service, that can be used at any level. Revising the manual has been a team exercise. There are contributions from a large number of experts, organizations and institutions. This new edition has seven modules. Several new vaccines that have become more readily available and used in recent years have been added. Also the section on integration with other health interventions has been expanded as exciting opportunities and experiences have become evident in the years following the previous edition. Module 1: Target diseases and vaccines Module 2: The vaccine cold chain Module 3: Ensuring safe injections Module 4: Microplanning for reaching every community Module 5: Managing an immunization session Module 6: Monitoring and surveillance Module 7: Partnering with communities.

Physical Sciences, Grade 12 Karin H. Kelder 2013-07-03 Study & Master Physical Sciences Grade 12 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Physical Sciences.

Educational Research L R Gay 2015-10-08 A leader in Introduction to Educational Research courses, Educational Research: Competencies for Analysis and Applications, ninth edition, remains a practical text focused on the skills and procedures students need in order to become competent consumers and producers of educational research. The accessible writing style and light, humorous tone of this book helps to demystify and enliven this demanding course. The text uses a direct, step-by-step approach to the research process. Tasks are included throughout the text to guide students through the process of creating their own research report. Published research articles are now included in every research methods chapter to provide students with illustrations of exemplary qualitative and quantitative research. Key changes in the ninth edition include an expanded coverage of qualitative research through a new chapter on Case Study Research (Chapter 17), a new chapter on Survey Research (Chapter 7), an increased emphasis on ethical considerations in the conduct of educational research (Chapter 1), and significant updates to Descriptive Statistics (Chapter 12) and Inferential Statistics (Chapter 13) that increase the coverage of how to use technology in the research process."

An Introduction to Numerical Methods and Analysis James F. Epperson 2013-06-06 Praise for the First Edition ". . . outstandingly appealing with regard to its style, contents, considerations of requirements of practice, choice of examples, and exercises." –Zentrablatt Math ". . . carefully structured with many detailed worked examples . . ." –The Mathematical Gazette ". . . an up-to-date and user-friendly account . . ." –Mathematika An Introduction to Numerical Methods and Analysis addresses the mathematics underlying approximation and scientific computing and successfully explains where approximation methods come from, why they sometimes work (or don't work), and when to use one of the many techniques that are available. Written in a style that emphasizes readability and usefulness for the numerical methods novice, the book begins with basic, elementary material and gradually builds up to more advanced topics. A selection of concepts required for the study of computational mathematics is introduced, and simple approximations using Taylor's Theorem are also treated in some depth. The text includes exercises that run the gamut from simple hand computations, to challenging derivations and minor proofs, to programming exercises. A greater emphasis on applied exercises as well as the cause and effect associated with numerical mathematics is featured throughout the book. An

Introduction to Numerical Methods and Analysis is the ideal text for students in advanced undergraduate mathematics and engineering courses who are interested in gaining an understanding of numerical methods and numerical analysis. National Education Technology Plan Arthur P. Hershaft 2011 Education is the key to America's economic growth and prosperity and to our ability to compete in the global economy. It is the path to higher earning power for Americans and is necessary for our democracy to work. It fosters the cross-border, cross-cultural collaboration required to solve the most challenging problems of our time. The National Education Technology Plan 2010 calls for revolutionary transformation. Specifically, we must embrace innovation and technology which is at the core of virtually every aspect of our daily lives and work. This book explores the National Education Technology Plan which presents a model of learning powered by technology, with goals and recommendations in five essential areas: learning, assessment, teaching, infrastructure and productivity.

How People Learn II National Academies of Sciences, Engineering, and Medicine 2018-10-27 There are many reasons to be curious about the way people learn, and the past several decades have seen an explosion of research that has important implications for individual learning, schooling, workforce training, and policy. In 2000, *How People Learn: Brain, Mind, Experience, and School: Expanded Edition* was published and its influence has been wide and deep. The report summarized insights on the nature of learning in school-aged children; described principles for the design of effective learning environments; and provided examples of how that could be implemented in the classroom. Since then, researchers have continued to investigate the nature of learning and have generated new findings related to the neurological processes involved in learning, individual and cultural variability related to learning, and educational technologies. In addition to expanding scientific understanding of the mechanisms of learning and how the brain adapts throughout the lifespan, there have been important discoveries about influences on learning, particularly sociocultural factors and the structure of learning environments. *How People Learn II: Learners, Contexts, and Cultures* provides a much-needed update incorporating insights gained from this research over the past decade. The book expands on the foundation laid out in the 2000 report and takes an in-depth look at the constellation of influences that affect individual learning. *How People Learn II* will become an indispensable resource to understand learning throughout the lifespan for educators of students and adults.

Study and Master Agricultural Sciences Grade 12 CAPS Teacher's File Altus Strydom 2014-06-26 Study & Master Agricultural Sciences Grade 12 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Agricultural Sciences.

Educart CBSE Maths Standard Sample Question Papers For Class 10 (For March 2020 Exam) Education Experts 2019-10-20 NEW VERSION: Available now based on the 20th September 2019 CBSE Sample Paper. This Maths (Standard) book is extra special as it was prepared by a CBSE author who knows about CBSE markings, official paper setting and CBSE Class 10th Exam patterns more than any other CBSE expert in the country. We were lucky to have him prepare the papers of this Maths book. It's been bought by more than 20,000+ students since it came out in October 2019 and is our best-seller already. This Book Covers the following: - 10 Practice Papers (solved) - 4 Self-assessment papers - CBSE September 2019 Sample Paper - CBSE March 2019 Board Paper (solved by topper) - CBSE 2018 Topper Answer Sheet Extra value items Added in this Book: - Utilising 15 minute reading time just before the exam (by CBSE topper) - Structuring your Maths Exam 3 hours smartly (by CBSE Markers) - 2020 marking scheme points (value points) underlined in each sample paper solution (CBSE markers look for these key points in your answers to allot full Marks). - The geometry section diagrams are accurately drawn to clear your understanding of all kinds of geometry questions that can appear in the upcoming February 2020 exam. A must buy book as vouched by many experts in Mathematics!

Introduction to Aircraft Flight Mechanics Thomas R. Yechout 2003 Based on a 15-year successful approach to teaching aircraft flight mechanics at the US Air Force Academy, this text explains the concepts and derivations of equations for aircraft flight mechanics. It covers aircraft performance, static stability, aircraft dynamics stability and feedback control.

New Directions in Child Abuse and Neglect Research National Research Council 2014-03-25 Each year, child protective services receive reports of child abuse and neglect involving six million children, and many more go unreported. The long-term human and fiscal consequences of child abuse and neglect are not relegated to the victims themselves -- they also impact their families, future relationships, and society. In 1993, the National Research Council (NRC) issued the report, *Understanding Child Abuse and Neglect*, which provided an overview of the research on child abuse and neglect. *New Directions in Child Abuse and Neglect Research* updates the 1993 report and provides new recommendations to respond to this public health challenge. According to this report, while there has been great progress in child abuse and neglect research, a coordinated, national research infrastructure with high-level federal support needs to be established and implemented immediately. *New Directions in Child Abuse and Neglect Research* recommends an actionable framework to guide and support future child abuse and neglect research. This report calls for a comprehensive, multidisciplinary approach to child abuse and neglect research that examines factors related to both children and adults across physical, mental, and behavioral health domains--including those in child welfare, economic support, criminal justice, education, and health care systems--and assesses the needs of a variety of subpopulations. It should also clarify the causal pathways related to child abuse and neglect and, more importantly, assess efforts to interrupt these pathways. *New Directions in Child Abuse and Neglect Research* identifies four areas to look to in developing a coordinated research enterprise: a national strategic plan, a national surveillance system, a new generation of researchers, and changes in the federal and state programmatic and policy response.

Mathematics for Physics Michael Stone 2009-07-09 An engagingly-written account of mathematical tools and ideas, this book provides a graduate-level introduction to the mathematics used in research in physics. The first half of the book focuses on the traditional mathematical methods of physics -- differential and integral equations, Fourier series and the calculus of variations. The second half contains an introduction to more advanced subjects, including differential geometry, topology and complex variables. The authors' exposition avoids excess rigor whilst explaining subtle but important points often glossed over in more elementary texts. The topics are illustrated at every stage by carefully chosen examples, exercises and problems drawn from realistic physics settings. These make it useful both as a textbook in advanced courses and for self-study. Password-protected solutions to the exercises are available to instructors at www.cambridge.org/9780521854030.

Learning Theories Dale H. Schunk 2011-01 An essential resource for understanding the main principles, concepts, and research findings of key theories of learning-especially as they relate to education-this proven text blends theory, research, and applications throughout, providing readers with a coherent and unified perspective on learning in educational settings. Key features of the text include: Vignettes at the start of each chapter illustrating some of the

principles discussed in the chapter, examples and applications throughout the chapters, and separate sections on instructional applications at the end of each chapter. A new chapter on Self-Regulation (Chapter 9). Core chapters on the neuroscience of learning (Chapter 2), constructivism (Chapter 6), cognitive learning processes (Chapter 7), motivation (Chapter 8), and development (Chapter 10) all related to teaching and learning. Updated sections on learning from technology and electronic media and how these advancements effectively promote learning in students (Chapters 7 & 10) Detailed content-area learning and models of instruction information form coherence and connection between teaching and learning in different content areas, learning principles, and processes (Chapters 2-10). Over 140 new references on the latest theoretical ideas, research findings, and applications in the field.

The Criminal Justice Periodical Index 1975

Physical Science National Learning Corporation 1988-06 The DSST Subject Standardized Tests are comprehensive college and graduate level examinations given by the Armed Forces, colleges and graduate schools. These exams enable students to earn college credit for what they have learned through self-study, on the job, or by other non-traditional means. The DSST Physical Science Passbook® prepares candidates for the DSST exam, which enables schools to award credit for knowledge acquired outside the normal classroom environment. It provides a series of informational texts as well as hundreds of questions and answers in the areas that will likely be covered on your upcoming exam, including but not limited to: physics; electricity and magnetism; matter; chemical reactions; atomic structure; and more.

Data-intensive Text Processing with MapReduce Jimmy Lin 2010 Our world is being revolutionized by data-driven methods: access to large amounts of data has generated new insights and opened exciting new opportunities in commerce, science, and computing applications. Processing the enormous quantities of data necessary for these advances requires large clusters, making distributed computing paradigms more crucial than ever. MapReduce is a programming model for expressing distributed computations on massive datasets and an execution framework for large-scale data processing on clusters of commodity servers. The programming model provides an easy-to-understand abstraction for designing scalable algorithms, while the execution framework transparently handles many system-level details, ranging from scheduling to synchronization to fault tolerance. This book focuses on MapReduce algorithm design, with an emphasis on text processing algorithms common in natural language processing, information retrieval, and machine learning. We introduce the notion of MapReduce design patterns, which represent general reusable solutions to commonly occurring problems across a variety of problem domains. This book not only intends to help the reader "think in MapReduce", but also discusses limitations of the programming model as well. This volume is a printed version of a work that appears in the Synthesis Digital Library of Engineering and Computer Science. Synthesis Lectures provide concise, original presentations of important research and development topics, published quickly, in digital and print formats. For more information visit www.morganclaypool.com

Life Sciences, Grade 10 Annemarie Gebhardt 2012-01-05 Study & Master Life Sciences Grade 10 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Life Sciences. The comprehensive Learner's Book includes: * an expanded contents page indicating the CAPS coverage required for each strand * a mind map at the beginning of each module that gives an overview of the contents of that module * activities throughout that help develop learners' science knowledge and skills as well as Formal Assessment tasks to test their learning * a review at the end of each unit that provides for consolidation of learning * case studies that link science to real-life situations and present balanced views on sensitive issues. * 'information' boxes providing interesting additional information and 'Note' boxes that bring important information to the learner's attention

Learning for Success : Skills and Strategies for Canadian Students Joan Fleet 1990 This book presents a comprehensive, systematic approach to the development of learning strategies.

Pathways to Urban Sustainability National Academies of Sciences, Engineering, and Medicine 2016-10-11 Cities have experienced an unprecedented rate of growth in the last decade. More than half the world's population lives in urban areas, with the U.S. percentage at 80 percent. Cities have captured more than 80 percent of the globe's economic activity and offered social mobility and economic prosperity to millions by clustering creative, innovative, and educated individuals and organizations. Clustering populations, however, can compound both positive and negative conditions, with many modern urban areas experiencing growing inequality, debility, and environmental degradation. The spread and continued growth of urban areas presents a number of concerns for a sustainable future, particularly if cities cannot adequately address the rise of poverty, hunger, resource consumption, and biodiversity loss in their borders. Intended as a comparative illustration of the types of urban sustainability pathways and subsequent lessons learned existing in urban areas, this study examines specific examples that cut across geographies and scales and that feature a range of urban sustainability challenges and opportunities for collaborative learning across metropolitan regions. It focuses on nine cities across the United States and Canada (Los Angeles, CA, New York City, NY, Philadelphia, PA, Pittsburgh, PA, Grand Rapids, MI, Flint, MI, Cedar Rapids, IA, Chattanooga, TN, and Vancouver, Canada), chosen to represent a variety of metropolitan regions, with consideration given to city size, proximity to coastal and other waterways, susceptibility to hazards, primary industry, and several other factors.

The Differentiated Classroom Carol Ann Tomlinson 2014-05-25 Although much has changed in schools in recent years, the power of differentiated instruction remains the same--and the need for it has only increased. Today's classroom is more diverse, more inclusive, and more plugged into technology than ever before. And it's led by teachers under enormous pressure to help decidedly unstandardized students meet an expanding set of rigorous, standardized learning targets. In this updated second edition of her best-selling classic work, Carol Ann Tomlinson offers these teachers a powerful and practical way to meet a challenge that is both very modern and completely timeless: how to divide their time, resources, and efforts to effectively instruct so many students of various backgrounds, readiness and skill levels, and interests. With a perspective informed by advances in research and deepened by more than 15 years of implementation feedback in all types of schools, Tomlinson explains the theoretical basis of differentiated instruction, explores the variables of curriculum and learning environment, shares dozens of instructional strategies, and then goes inside elementary and secondary classrooms in nearly all subject areas to illustrate how real teachers are applying differentiation principles and strategies to respond to the needs of all learners. This book's insightful guidance on what to differentiate, how to differentiate, and why lays the groundwork for bringing differentiated instruction into your own classroom or refining the work you already do to help each of your wonderfully unique learners move toward greater knowledge, more advanced skills, and expanded understanding. Today more than ever, *The Differentiated Classroom* is a must-have staple for every teacher's shelf and every school's professional development collection.

The Foucault Effect Michel Foucault 1991-07-09 Based on Foucault's 1978 and 1979 lectures on rationalities of government, this work examines the art or activity of government and the different ways in which it has been made

thinkable and practicable. There are also contributions of other scholars exploring modern manifestations of government.

Essentials of Nursing Research Denise F. Polit 2013-01-28 This eighth edition of *Essentials of Nursing Research*, written by AJN awardwinning authors, along with its accompanying Study Guide for *Essentials of Nursing Research*, student learning ancillaries, and instructor teaching materials present a unique learningteaching package that is designed to teach students how to read and critique research reports, and to appreciate the application of research findings to nursing practice. New to this edition: New text organization with separate sections on quantitative and qualitative research offer greater continuity of ideas to better meet the needs of students and faculty. New online chapter supplements for every chapter expand student's knowledge of research topics New chapter on mixed methods research, which involves the blending of qualitative and quantitative data in a single inquiry, responds to the surge of interest in this type of research Increased emphasis on evidencebased practice (EBP) especially in the areas of asking wellworded questions for EBP and searching for such evidence guides the reader from theory to application. Enhanced assistance for instructors with numerous suggestions on how to make learning aboutand teachingresearch methods more rewarding.

Developing Assessments for the Next Generation Science Standards National Research Council 2014-05-29 Assessments, understood as tools for tracking what and how well students have learned, play a critical role in the classroom. Developing Assessments for the Next Generation Science Standards develops an approach to science assessment to meet the vision of science education for the future as it has been elaborated in A Framework for K-12 Science Education (Framework) and Next Generation Science Standards (NGSS). These documents are brand new and the changes they call for are barely under way, but the new assessments will be needed as soon as states and districts begin the process of implementing the NGSS and changing their approach to science education. The new Framework and the NGSS are designed to guide educators in significantly altering the way K-12 science is taught. The Framework is aimed at making science education more closely resemble the way scientists actually work and think, and making instruction reflect research on learning that demonstrates the importance of building coherent understandings over time. It structures science education around three dimensions - the practices through which scientists and engineers do their work, the key crosscutting concepts that cut across disciplines, and the core ideas of the disciplines - and argues that they should be interwoven in every aspect of science education, building in sophistication as students progress through grades K-12. Developing Assessments for the Next Generation Science Standards recommends strategies for developing assessments that yield valid measures of student proficiency in science as described in the new Framework. This report reviews recent and current work in science assessment to determine which aspects of the Framework's vision can be assessed with available techniques and what additional research and development will be needed to support an assessment system that fully meets that vision. The report offers a systems approach to science assessment, in which a range of assessment strategies are designed to answer different kinds of questions with appropriate degrees of specificity and provide results that complement one another. Developing Assessments for the Next Generation Science Standards makes the case that a science assessment system that meets the Framework's vision should consist of assessments designed to support classroom instruction, assessments designed to monitor science learning on a broader scale, and indicators designed to track opportunity to learn. New standards for science education make clear that new modes of assessment designed to measure the integrated learning they promote are essential. The recommendations of this report will be key to making sure that the dramatic changes in curriculum and instruction signaled by Framework and the NGSS reduce inequities in science education and raise the level of science education for all students.

Discrete Mathematics for Computer Science Gary Haggard 2005 Master the fundamentals of discrete mathematics with DISCRETE MATHEMATICS FOR COMPUTER SCIENCE with Student Solutions Manual CD-ROM! An increasing number of computer scientists from diverse areas are using discrete mathematical structures to explain concepts and problems and this mathematics text shows you how to express precise ideas in clear mathematical language. Through a wealth of exercises and examples, you will learn how mastering discrete mathematics will help you develop important reasoning skills that will continue to be useful throughout your career.

Handbook of Test Development Suzanne Lane 2015-10-08 The second edition of the Handbook of Test Development provides

graduate students and professionals with an up-to-date, research-oriented guide to the latest developments in the field. Including thirty-two chapters by well-known scholars and practitioners, it is divided into five sections, covering the foundations of test development, content definition, item development, test design and form assembly, and the processes of test administration, documentation, and evaluation. Keenly aware of developments in the field since the publication of the first edition, including changes in technology, the evolution of psychometric theory, and the increased demands for effective tests via educational policy, the editors of this edition include new chapters on assessing noncognitive skills, measuring growth and learning progressions, automated item generation and test assembly, and computerized scoring of constructed responses. The volume also includes expanded coverage of performance testing, validity, fairness, and numerous other topics. Edited by Suzanne Lane, Mark R. Raymond, and Thomas M. Haladyna, *The Handbook of Test Development*, 2nd edition, is based on the revised Standards for Educational and Psychological Testing, and is appropriate for graduate courses and seminars that deal with test development and usage, professional testing services and credentialing agencies, state and local boards of education, and academic libraries serving these groups.

Analysis of Boolean Functions Ryan O'Donnell 2014-06-05 This graduate-level text gives a thorough overview of the analysis of Boolean functions, beginning with the most basic definitions and proceeding to advanced topics.

Study and Master Mathematical Literacy Grade 12 CAPS Learner's Book Karen Morrison 2014-05-01

Physics for Scientists and Engineers, Volume 2 Raymond A. Serway 2013-01-01 Achieve success in your physics course by making the most of what PHYSICS FOR SCIENTISTS AND ENGINEERS has to offer. From a host of in-text features to a range of outstanding technology resources, you'll have everything you need to understand the natural forces and principles of physics. Throughout every chapter, the authors have built in a wide range of examples, exercises, and illustrations that will help you understand the laws of physics AND succeed in your course! Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Essentials of Metaheuristics (Second Edition) Sean Luke 2012-12-20 Interested in the Genetic Algorithm? Simulated Annealing? Ant Colony Optimization? Essentials of Metaheuristics covers these and other metaheuristics algorithms, and is intended for undergraduate students, programmers, and non-experts. The book covers a wide range of algorithms, representations, selection and modification operators, and related topics, and includes 71 figures and 135 algorithms great and small. Algorithms include: Gradient Ascent techniques, Hill-Climbing variants, Simulated Annealing, Tabu Search variants, Iterated Local Search, Evolution Strategies, the Genetic Algorithm, the Steady-State Genetic Algorithm, Differential Evolution, Particle Swarm Optimization, Genetic Programming variants, One- and Two-Population Competitive Coevolution, N-Population Cooperative Coevolution, Implicit Fitness Sharing, Deterministic Crowding, NSGA-II, SPEA2, GRASP, Ant Colony Optimization variants, Guided Local Search, LEM, PBIL, UMDA, cGA, BOA, SAMUEL, ZCS, XCS, and XCSF.

An Introduction to Neural Networks Kevin Gurney 2018-10-08 Though mathematical ideas underpin the study of neural networks, the author presents the fundamentals without the full mathematical apparatus. All aspects of the field are tackled, including artificial neurons as models of their real counterparts; the geometry of network action in pattern space; gradient descent methods, including back-propagation; associative memory and Hopfield nets; and self-organization and feature maps. The traditionally difficult topic of adaptive resonance theory is clarified within a hierarchical description of its operation. The book also includes several real-world examples to provide a concrete focus. This should enhance its appeal to those involved in the design, construction and management of networks in commercial environments and who wish to improve their understanding of network simulator packages. As a comprehensive and highly accessible introduction to one of the most important topics in cognitive and computer science, this volume should interest a wide range of readers, both students and professionals, in cognitive science, psychology, computer science and electrical engineering.

An African Elegy Ben Okri 2015-04-30 Dreams are the currency of Okri's writing, particularly in this first book of poems, *An African Elegy*, but also in his books of short stories and prize-winning novel *The Famished Road*. Okri's dreams are made on the stuff of Africa's colossal economic and political problems, and reading the poems is to experience a constant succession of metaphors of resolution in both senses of the word. Virtually every poem contains an exhortation to climb out of the African miasma, and virtually every poem harvests the dream of itself with an upbeat restorative ending' - Giles Foden, *Times Literary Supplement*