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Integrated Science for CSEC® Oxford University Press - Children Written specifically for use in Caribbean schools, this course is tailored to the requirements of Integrated Science students and the latest CSEC syllabus by providing course contents in a clear, concise and accessible way. It now features newly added digital resources and increased SBA guidance, to help engage students and provide additional support as they study for their examination. Linear Regression Analysis Theory and Computing World Scientific "This volume presents in detail the fundamental theories of linear regression analysis and diagnosis, as well as the relevant statistical computing techniques so that readers are able to actually model the data using the techniques described in the book. This book is suitable for graduate students who are either majoring in statistics/biostatistics or using linear regression analysis substantially in their subject area." --Book Jacket. Shaping the future we want UN Decade of Education for Sustainable Development; final report UNESCO Human and Social Biology The Protein Protocols Handbook Springer The Protein Protocols Handbook, Second Edition aims to provide a cross-section of analytical techniques commonly used for proteins and peptides, thus providing a benchtop manual and guide for those who are new to the protein chemistry laboratory and for those more established workers who wish to use a technique for the first time. All chapters are written in the same format as that used in the Methods in Molecular Biology™ series. Each chapter opens with a description of the basic theory behind the method being described. The Materials section lists all the chemicals, reagents, buffers, and other materials necessary for carrying out the protocol. Since the principal goal of the book is to provide experimentalists with a full account of the practical steps necessary for carrying out each protocol successfully, the Methods section contains detailed step-by-step descriptions of every protocol that should result in the successful execution of each method. The Notes section complements the Methods material by indicating how best to deal with any problem or difficulty that may arise when using a given technique, and how to go about making the widest variety of modifications or alterations to the protocol. Since the first edition of this book was published in 1996 there have, of course, been significant developments in the field of protein chemistry. Student Misconceptions and Errors in Physics and Mathematics Exploring Data from TIMSS and TIMSS Advanced Springer Nature This open access report explores the nature and extent of students' misconceptions and misunderstandings related to core concepts in physics and mathematics and physics across grades four, eight and 12. Twenty years of data from the IEA's Trends in International Mathematics and Science Study (TIMSS) and TIMSS Advanced assessments are analyzed, specifically for five countries (Italy, Norway, Russian Federation, Slovenia, and the United States) who participated in all or almost all TIMSS and TIMSS Advanced assessments between 1995 and 2015. The report focuses on students' understandings related to gravitational force in physics and linear equations in mathematics. It identifies some specific misconceptions, errors, and misunderstandings demonstrated by the TIMSS Advanced grade 12 students for these core concepts, and shows how these can be traced back to poor foundational development of these concepts in earlier grades. Patterns in misconceptions and misunderstandings are reported by grade, country, and gender. In addition, specific misconceptions and misunderstandings are tracked over time, using trend items administered in multiple assessment cycles. The study and associated methodology may enable education systems to help identify specific needs in the curriculum, improve inform instruction across grades and also raise possibilities for future TIMSS assessment design and reporting that may provide more diagnostic outcomes. Science With The Cherenkov Telescope Array World Scientific This book summarizes the science to be carried out by the upcoming Cherenkov Telescope Array, a major ground-based gamma-ray observatory that will be constructed over the next six to eight years. The major scientific themes, as well as core program of key science projects, have been developed by the CTA Consortium, a collaboration of scientists from many institutions worldwide. CTA will be the major facility in high-energy and very high-energy photon astronomy over the next decade and beyond. CTA will have capabilities well beyond past and present observatories. Thus, CTA's science program is expected to be rich and broad and will complement other major multiwavelength and multimessenger facilities. This book is intended to be the primary resource for the science case for CTA and it thus will be of great interest to the broader physics and astronomy communities. The electronic version (e-book) is available in open access. Agricultural Science A Junior Secondary Course for the

Caribbean This three-part course takes into account recent changes and provides a base for the CXC examination. Astrophysics in a Nutshell Second Edition Princeton University Press The ideal one-semester astrophysics introduction for science undergraduates—now expanded and fully updated Winner of the American Astronomical Society's Chambliss Award, Astrophysics in a Nutshell has become the text of choice in astrophysics courses for science majors at top universities in North America and beyond. In this expanded and fully updated second edition, the book gets even better, with a new chapter on extrasolar planets; a greatly expanded chapter on the interstellar medium; fully updated facts and figures on all subjects, from the observed properties of white dwarfs to the latest results from precision cosmology; and additional instructive problem sets. Throughout, the text features the same focused, concise style and emphasis on physics intuition that have made the book a favorite of students and teachers. Written by Dan Maoz, a leading active researcher, and designed for advanced undergraduate science majors, Astrophysics in a Nutshell is a brief but thorough introduction to the observational data and theoretical concepts underlying modern astronomy. Generously illustrated, it covers the essentials of modern astrophysics, emphasizing the common physical principles that govern astronomical phenomena, and the interplay between theory and observation, while also introducing subjects at the forefront of modern research, including black holes, dark matter, dark energy, and gravitational lensing. In addition to serving as a course textbook, Astrophysics in a Nutshell is an ideal review for a qualifying exam and a handy reference for teachers and researchers. The most concise and current astrophysics textbook for science majors—now expanded and fully updated with the latest research results Contains a broad and well-balanced selection of traditional and current topics Uses simple, short, and clear derivations of physical results Trains students in the essential skills of order-of-magnitude analysis Features a new chapter on extrasolar planets, including discovery techniques Includes new and expanded sections and problems on the physics of shocks, supernova remnants, cosmic-ray acceleration, white dwarf properties, baryon acoustic oscillations, and more Contains instructive problem sets at the end of each chapter Solutions manual (available only to professors) Investing in Cultural Diversity and Intercultural Dialogue UNESCO This report analyses all aspects of cultural diversity, which has emerged as a key concern of the international community in recent decades, and maps out new approaches to monitoring and shaping the changes that are taking place. It highlights, in particular, the interrelated challenges of cultural diversity and intercultural dialogue and the way in which strong homogenizing forces are matched by persistent diversifying trends. The report proposes a series of ten policy-oriented recommendations, to the attention of States, intergovernmental and non-governmental organizations, international and regional bodies, national institutions and the private sector on how to invest in cultural diversity. Emphasizing the importance of cultural diversity in different areas (languages, education, communication and new media development, and creativity and the marketplace) based on data and examples collected from around the world, the report is also intended for the general public. It proposes a coherent vision of cultural diversity and clarifies how, far from being a threat, it can become beneficial to the action of the international community. Principles of Business for CSEC Written by a team of experts in Caribbean business education, Principles of Business for CSEC(R) engages students with the fundamental concepts of business, and encourages the development of their critical thinking and entrepreneurial skills. Chemistry for Csec Oxford University Press, USA Chemistry for CSEC is written by experienced science teachers and authors for students studying for the CSEC general proficiency exam. It is written to double page spreads and illustrated with full colour diagrams and photographs. The book contains practical activities, key facts and case studies to stimulate interest and aid learning, SBA skills chart and references to SBA in the main-body text along with CSEC style questions. Biology for CSEC® Oxford University Press - Children Newly revised in line with the latest syllabus and with a modernised, student-friendly design, which provides additional practice for students and brings lab work to life with exciting activities and simulations. The Performance Economy Springer This updated and revised edition outlines strategies and models for how to use technology and knowledge to improve performance, create jobs and increase income. It shows what skills will be required to produce, sell and manage performance over time, and how manual jobs can contribute to reduce the consumption of non-renewable resources. Principles of Economics 2e Physics for CSEC Oxford University Press, USA Newly revised in line with the latest syllabus and with a modernised, student-friendly design, including a truly interactive CD which provides additional practice for students and brings lab work to life with exciting activities and simulations. Cxc Biology Macmillan How Tobacco Smoke Causes Disease The Biology and Behavioral Basis for Smoking-attributable Disease : a Report of the Surgeon General U.S. Government Printing Office This report considers the biological and behavioral mechanisms that may underlie the pathogenicity of tobacco smoke. Many Surgeon General's reports have considered research findings on mechanisms in assessing the biological plausibility of associations observed in epidemiologic studies. Mechanisms of disease are important because they may provide plausibility, which is one of the guideline criteria for assessing evidence on causation. This report specifically reviews the evidence on the potential mechanisms by which smoking causes diseases and considers whether a mechanism is likely to be operative in the production of human disease by tobacco smoke. This evidence is relevant to understanding how smoking causes disease, to identifying those who may be particularly susceptible, and to assessing the potential risks of tobacco products. Geospatial Technology for Earth Observation Springer Science & Business Media Earth Observation interacts with space, remote sensing, communication, and information technologies, and plays an increasingly significant role in Earth related scientific studies, resource management, homeland security, topographic mapping, and development of a healthy, sustainable environment and community. Geospatial Technology for Earth Observation provides an in-depth and broad collection of recent progress in Earth observation. Contributed by leading experts in this field, the book covers satellite, airborne and ground remote sensing systems and system integration, sensor orientation, remote sensing physics, image classification and analysis, information extraction, geospatial service,

and various application topics, including cadastral mapping, land use change evaluation, water environment monitoring, flood mapping, and decision making support. Geospatial Technology for Earth Observation serves as a valuable training source for researchers, developers, and practitioners in geospatial science and technology industry. It is also suitable as a reference book for upper level college students and graduate students in geospatial technology, geosciences, resource management, and informatics. Introduction to Smooth Manifolds Springer Science & Business Media Author has written several excellent Springer books.; This book is a sequel to Introduction to Topological Manifolds; Careful and illuminating explanations, excellent diagrams and exemplary motivation; Includes short preliminary sections before each section explaining what is ahead and why Integrated approaches to health A handbook for the evaluation of One Health Wageningen Academic Publishers One Health addresses health challenges arising from the intertwined spheres of humans, animals and ecosystems. This handbook is the product of an interdisciplinary effort to provide science-based guidance for the evaluation of One Health and other integrated approaches to health. It guides the reader through a systems approach and framework to evaluate such approaches in a standardised way. It provides an overview of concepts and metrics from health and life sciences, social sciences, economics, and ecology that are relevant for the evaluation of the processes involved, as well as the characterisation of expected and unexpected outcomes of One Health initiatives. Finally, the handbook provides guidance and practical protocols to help plan and implement evaluations in order to generate new insights and provide meaningful information about the value of One Health. The handbook is intended for practitioners, researchers, evaluators as well as funders of integrated approaches to health and beyond. Confronting Commercial Sexual Exploitation and Sex Trafficking of Minors in the United States National Academies Press Every day in the United States, children and adolescents are victims of commercial sexual exploitation and sex trafficking. Despite the serious and long-term consequences for victims as well as their families, communities, and society, efforts to prevent, identify, and respond to these crimes are largely under supported, inefficient, uncoordinated, and unevaluated. Confronting Commercial Sexual Exploitation and Sex Trafficking of Minors in the United States examines commercial sexual exploitation and sex trafficking of U.S. citizens and lawful permanent residents of the United States under age 18. According to this report, efforts to prevent, identify, and respond to these crimes require better collaborative approaches that build upon the capabilities of people and entities from a range of sectors. In addition, such efforts need to confront demand and the individuals who commit and benefit from these crimes. The report recommends increased awareness and understanding, strengthening of the law's response, strengthening of research to advance understanding and to support the development of prevention and intervention strategies, support for multi-sector and interagency collaboration, and creation of a digital information-sharing platform. A nation that is unaware of these problems or disengaged from solutions unwittingly contributes to the ongoing abuse of minors. If acted upon in a coordinated and comprehensive manner, the recommendations of Confronting Commercial Sexual Exploitation and Sex Trafficking of Minors in the United States can help advance and strengthen the nation's emerging efforts to prevent, identify, and respond to commercial sexual exploitation and sex trafficking of minors in the United States. Economics for CSEC® Examinations Suitable for students studying for CSEC examinations, this book includes features such as: written for the latest CSEC syllabus; learning objectives stated for each chapter; keywords highlighted in the margins form a glossary; and, diagrams and pictures that encourage understanding. Studio Thinking 2 The Real Benefits of Visual Arts Education, Second Edition Teachers College Press " The first edition of this bestseller was featured in The New York Times and The Boston Globe for its groundbreaking research on the positive effects of art education on student learning across the curriculum. Capitalizing on observations and conversations with educators who have used the Studio Thinking Framework in diverse settings, this expanded edition features new material, including: The addition of Exhibitions as a fourth Studio Structure for Learning (along with Demonstration-Lecture, Students-at-Work, and Critique). Explanation and examples of the dispositional elements of each Habit, including skill, alertness (noticing appropriate times to put skills to use), and inclination (the drive or motivation to employ skills). A chart aligning Habits to the English Language Arts and Mathematics Common Core. Descriptions of how the Framework has been used inside and outside of schools in curriculum planning, teaching, and assessment across arts and non-arts disciplines. A full-color insert with new examples of student art. Studio Thinking 2 will help advocates explain arts education to policymakers, help art teachers develop and refine their teaching and assessment practices, and assist educators in other disciplines to learn from existing practices in arts education. Lois Hetland is professor and chair of art education at Massachusetts College of Art and Design and senior research affiliate at Project Zero, Harvard Graduate School of Education. Ellen Winner is professor and chair of psychology at Boston College and a senior research associate at Project Zero. Shirley Veenema is an instructor in visual arts at Phillips Academy in Andover, Massachusetts. Kimberly M. Sheridan is an assistant professor in the College of Education and Human Development and the College of Visual and Performing Arts at George Mason University. "Our decade of using the Studio Thinking Framework in California's schools positions us for success in this new era because of the foundation of reflective, creative, and critical thinking developed in our schools and districts." —From the Foreword to the Second Edition by Louise Music, Executive Director of Integrated Learning, Alameda County Office of Education, Hayward, CA "Studio Thinking [is] a vision not only of learning in the arts but what could be learning most anywhere." —From the Foreword to the First Edition by David N. Perkins, Professor of Education, Harvard Graduate School of Education, and Senior Co-Director of Harvard Project Zero Praise for the First Edition of Studio Thinking— "Winner and Hetland have set out to show what it means to take education in the arts seriously, in its own right." —The New York Times "This book is very educational and would be helpful to art teachers in promoting quality teaching in their classrooms." —School Arts Magazine "Studio Thinking is a major contribution to the field." —Arts & Learning Review "The research in Studio Thinking is groundbreaking and important because it is

anchored in the actual practice of teaching artists.... The ideas in *Studio Thinking* continue to provide a vehicle with which to navigate and understand the complex work in which we are all engaged.” —Teaching Artists Journal “Hetland and her colleagues reveal dozens of practical measures that could be adopted by any arts program, inside or outside of the school.... This is a bold new step in arts education.” —David R. Olson, Professor Emeritus, University of Toronto “Will be at the top of the list of essential texts in arts education. I know of no other work in art education with this combination of authenticity and insight.” —Lars Lindström, Stockholm Institute of Education “The eight studio habits of mind should become a conceptual framework for all preservice art education programs; this book should be read by all early and experienced art educators.” —Mary Ann Stankiewicz, The Pennsylvania State University

" A World of Prose Third Edition Hodder Education A World of Prose includes all the prescribed texts for the revised CSEC English A and English B syllabuses. It has been compiled with the approval of the Caribbean Examinations Council by Editors who have served as CSEC English panel members. - The material in this anthology will help students to prepare effectively for the CSEC examination. - The texts have been chosen to cover a wide range of themes and subjects and include a balance of well-known texts from the past as well as more recent works. - The anthology includes texts from the Caribbean and the rest of the world to stimulate an interest in and enjoyment of reading and literature. - This collection contains notes on each text and questions to provoke discussion, as well as a useful checklist to help students with literary analysis. - The book contains practical guidance for students on how to tackle examination questions, with examples of model answers for reference.

The Modern Survival Retreat Paladin Press Modern retreaters have a new enemy to fear - our own government. In this companion to the classic book *The Survival Retreat*, Ragnar answers such vital questions as how to identify exactly who threatens your freedom, when to occupy your retreat and how to fight the government when it goes hard-core against you.

The Spelit Power Matrix *Untangling the Organizational Environment With the Spelit Leadership Tool* Createspace Independent Pub The SPELIT POWER MATRIX is a leadership tool for untangling the organizational environment from a social, political, economic, legal, intercultural and technical view. The SPELIT analysis method was developed for adult learners to have a framework for determining and formulating the answer to the question: What is? There is a need to analyze the environment in all organizations, whether you are entering a new organization or to benchmark the existing organization. The purpose of this text is to show how perceptive leaders can analyze environments in preparation for possible future action. We demonstrate how the methodology aligns with previous theories regarding environmental scanning and produces a workable framework for the perceptive leader. The SPELIT POWER MATRIX is intended for practitioners doing a market analysis or diagnosis prior to implementing transitions, benchmarking in anticipation of an intervention, and can be used by undergraduate students and seasoned practitioners.

STEM Project-Based Learning *An Integrated Science, Technology, Engineering, and Mathematics (STEM) Approach* Springer Science & Business Media This second edition of *Project-Based Learning (PBL)* presents an original approach to Science, Technology, Engineering and Mathematics (STEM) centric PBL. We define PBL as an “ill-defined task with a well-defined outcome,” which is consistent with our engineering design philosophy and the accountability highlighted in a standards-based environment. This model emphasizes a backward design that is initiated by well-defined outcomes, tied to local, state, or national standard that provide teachers with a framework guiding students’ design, solving, or completion of ill-defined tasks. This book was designed for middle and secondary teachers who want to improve engagement and provide contextualized learning for their students. However, the nature and scope of the content covered in the 14 chapters are appropriate for preservice teachers as well as for advanced graduate method courses. New to this edition is revised and expanded coverage of STEM PBL, including implementing STEM PBL with English Language Learners and the use of technology in PBL. The book also includes many new teacher-friendly forms, such as advanced organizers, team contracts for STEM PBL, and rubrics for assessing PBL in a larger format.

The Biology of Exercise *Perspectives* Cshl Exercise training provokes widespread transformations in the human body, requiring coordinated changes in muscle composition, blood flow, neuronal and hormonal signaling, and metabolism. These changes enhance physical performance, improve mental health, and delay the onset of aging and disease. Understanding the molecular basis of these changes is therefore important for optimizing athletic ability and for developing drugs that elicit therapeutic effects. Written and edited by experts in the field, this collection from Cold Spring Harbor *Perspectives in Medicine* examines the biological basis of exercise from the molecular to the systemic levels. Contributors discuss how transcriptional regulation, cytokine and hormonal signaling, glucose metabolism, epigenetic modifications, microRNA profiles, and mitochondrial and ribosomal functions are altered in response to exercise training, leading to improved skeletal muscle, hippocampal, and cardiovascular function. Cross talk among the pathways underlying tissue-specific and systemic responses to exercise is also considered. The authors also discuss how the understanding of such molecular mechanisms may lead to the development of drugs that mitigate aging and disease. This volume will therefore serve as a vital reference for all involved in the fields of sports science and medicine, as well as anyone seeking to understand the molecular mechanisms by which exercise promotes whole-body health.

Janeway's Immunobiology Garland Science The Janeway's Immunobiology CD-ROM, *Immunobiology Interactive*, is included with each book, and can be purchased separately. It contains animations and videos with voiceover narration, as well as the figures from the text for presentation purposes.

Proceedings of the 8th International Conference on Sciences of Electronics, Technologies of Information and Telecommunications (SETIT18), Vol. 1 This two-volume book presents an unusually diverse selection of research papers, covering all major topics in the fields of information and communication technologies and related sciences. It provides a wide-angle snapshot of current themes in information and power engineering, pursuing a cross-disciplinary approach to do so. The book gathers revised contributions that were presented at the 2018 International Conference: Sciences of Electronics, Technologies of Information and Telecommunication (SETIT'18), held on

20-22 December 2018 in Hammamet, Tunisia. This eighth installment of the event attracted a wealth of submissions, and the papers presented here were selected by a committee of experts and underwent additional, painstaking revision. Topics covered include: · Information Processing · Human-Machine Interaction · Computer Science · Telecommunications and Networks · Signal Processing · Electronics · Image and Video This broad-scoped approach is becoming increasingly popular in scientific publishing. Its aim is to encourage scholars and professionals to overcome disciplinary barriers, as demanded by current trends in the industry and in the consumer market, which are rapidly leading toward a convergence of data-driven applications, computation, telecommunication, and energy awareness. Given its coverage, the book will benefit graduate students, researchers and practitioners who need to keep up with the latest technological advances. The Next Step Exponential Life Bbva-Open Mind The Next Step: Exponential Life presents essays on the potential of what are known as "exponential technologies"--those whose development is accelerating rapidly, such as robotics, artificial intelligence or industrial biology--considering their economic, social, environmental, ethical and even ontological implications. This book's premise is that humanity is at the beginning of a technological revolution that is evolving at a much faster pace than earlier ones--a revolution is so far-reaching it is destined to generate transformations we can only begin to imagine. Contributors include Aubrey D.N.J. de Grey, Jonathan Rossiter, Joseph A. Paradiso, Kevin Warwick, Huma Shah, Ramón López de Mántaras, Helen Papagiannis, Jay David Bolter, Maria Engberg, Robin Hanson, Stuart Russell, Darrell M. West, Francisco González, Chris Skinner, Steven Monroe Lipkin, S. Matthew Liao, James Giordano, Luciano Floridi, Seán Ó Héigeartaigh and Martin Rees. Probability Theory and Stochastic Processes with Applications (Second Edition) World Scientific Publishing Company This second edition has a unique approach that provides a broad and wide introduction into the fascinating area of probability theory. It starts on a fast track with the treatment of probability theory and stochastic processes by providing short proofs. The last chapter is unique as it features a wide range of applications in other fields like Vlasov dynamics of fluids, statistics of circular data, singular continuous random variables, Diophantine equations, percolation theory, random Schrödinger operators, spectral graph theory, integral geometry, computer vision, and processes with high risk. Many of these areas are under active investigation and this volume is highly suited for ambitious undergraduate students, graduate students and researchers. Human and Social Biology for Caribbean Schools Intended for the students following the Human and Social Biology syllabus for CXC (CSEC). This illustrated work contains explanations on all topics and includes Caribbean examples. It is a useful resource for the students of this subject. Immunology at a Glance Wiley-Blackwell The At a Glance series sets out to summarise the essential information about a particular subject for the student requiring a quick introduction or a guide to revision. This is achieved by taking each part of the subject in turn and condensing it into a two-page spread with a schematic diagram on the left and a concise explanation on the right. This book presents a broad look at immunology with the aid of a series of thoughtfully constructed sketches to show the mechanisms involved in immunological processes. It covers: the scope of immunology cellular and hormonal factors immunology of infectious disease antibody formation, structure and function immunology of cancer hypersensitivity autoimmunity and immunodeficiency. The sixth edition features two new spreads on antigen recognition and processing, and cell interactions which together comprise the antibody response which is now divided into two sections. Throughout this new edition, the major emphasis has been the advances of our knowledge of the genetic basis of immunology. The appendix of CD classification has also been updated. Intermediate Microeconomics with Calculus A Modern Approach W. W. Norton Rigorous and modern now with calculus integrated into the main text." New Lower Secondary Science Astronomy Astronomy is written in clear non-technical language, with the occasional touch of humor and a wide range of clarifying illustrations. It has many analogies drawn from everyday life to help non-science majors appreciate, on their own terms, what our modern exploration of the universe is revealing. The book can be used for either a one-semester or two-semester introductory course (bear in mind, you can customize your version and include only those chapters or sections you will be teaching.) It is made available free of charge in electronic form (and low cost in printed form) to students around the world. If you have ever thrown up your hands in despair over the spiraling cost of astronomy textbooks, you owe your students a good look at this one. Coverage and Scope Astronomy was written, updated, and reviewed by a broad range of astronomers and astronomy educators in a strong community effort. It is designed to meet scope and sequence requirements of introductory astronomy courses nationwide. Chapter 1: Science and the Universe: A Brief Tour Chapter 2: Observing the Sky: The Birth of Astronomy Chapter 3: Orbits and Gravity Chapter 4: Earth, Moon, and Sky Chapter 5: Radiation and Spectra Chapter 6: Astronomical Instruments Chapter 7: Other Worlds: An Introduction to the Solar System Chapter 8: Earth as a Planet Chapter 9: Cratered Worlds Chapter 10: Earthlike Planets: Venus and Mars Chapter 11: The Giant Planets Chapter 12: Rings, Moons, and Pluto Chapter 13: Comets and Asteroids: Debris of the Solar System Chapter 14: Cosmic Samples and the Origin of the Solar System Chapter 15: The Sun: A Garden-Variety Star Chapter 16: The Sun: A Nuclear Powerhouse Chapter 17: Analyzing Starlight Chapter 18: The Stars: A Celestial Census Chapter 19: Celestial Distances Chapter 20: Between the Stars: Gas and Dust in Space Chapter 21: The Birth of Stars and the Discovery of Planets outside the Solar System Chapter 22: Stars from Adolescence to Old Age Chapter 23: The Death of Stars Chapter 24: Black Holes and Curved Spacetime Chapter 25: The Milky Way Galaxy Chapter 26: Galaxies Chapter 27: Active Galaxies, Quasars, and Supermassive Black Holes Chapter 28: The Evolution and Distribution of Galaxies Chapter 29: The Big Bang Chapter 30: Life in the Universe Appendix A: How to Study for Your Introductory Astronomy Course Appendix B: Astronomy Websites, Pictures, and Apps Appendix C: Scientific Notation Appendix D: Units Used in Science Appendix E: Some Useful Constants for Astronomy Appendix F: Physical and Orbital Data for the Planets Appendix G: Selected Moons of the Planets Appendix H: Upcoming Total Eclipses Appendix I: The Nearest Stars, Brown Dwarfs, and White Dwarfs Appendix J: The Brightest Twenty Stars Appendix K: The Chemical Elements Appendix L: The

Constellations Appendix M: Star Charts and Sky Event Resources

The Chandra X-ray Observatory Exploring the High Energy Universe

NASA's Chandra X-Ray Observatory has ushered in a revolution in X-ray astronomy. Over the last two decades Chandra has captured stunning celestial X-ray images, measured spectra and monitored light curves to reveal and map the hottest, most energetic regions of the universe. Celebrating its 20th anniversary, this book includes current reviews of the major discoveries and scientific results made by Chandra, authored by leading experts in each sub-field. Documenting the progress, discoveries and developments implemented by the mission, this book provides its readers with a comprehensive review of the mission thus far and its potential future implications. The book includes beautiful images of celestial sources generated from Chandra and multi-wavelength data. 3D figures, movies and interactive illustrations are also used throughout to enhance the text.

Collins Integrated Science for the Caribbean

Collins Integrated science for the Caribbean is an activity-led course set in contexts relevant to the Caribbean. Suitable for lower secondary students in all parts of the Caribbean, this course has been specially developed to help students develop the skills they need for success in science.