Scientific American Biology For A Changing World Pdf

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Oceans - 2007
Covering nearly three-quarters of our planet, the world's oceans are a vast and unique ecosystem from which all life on Earth originated. But each year the marine realm is more susceptible to harm by careless exploitation, and as demands for food, waste disposal, transport, and travel increase, the fate of the world's oceans hangs in the balance. This timely guide explores this expansive-and fragile-frontier. Oceans collects more than thirty thematically arranged articles from the past decade, including recent pieces written in the wake of the 2004 tsunami, and features articles that investigate the origins of the world's oceans, the diversity of life in the water, the state of global fisheries, the dangers of natural disasters, and the perils oceans face, whether induced by nature or by humans. With a breadth of topics as wide as the ocean is deep, this Scientific American anthology will be indispensible for readers interested in the evolution, ecology, and conservation of the oceanic ecosystem.

Scientific American, the premier general-interest science magazine, reports the most important developments in modern science, medicine, and technology to more than three million readers worldwide. The oldest continuously published magazine in the United States, it has been at the forefront of science for more than 150 years. Evolution: A Scientific American Reader, is also published by the University of Chicago Press. Book jacket.
Scientific American Biology for a Changing World with Corephysiology & Launchpad 6 Month Online Card [With EBook] - Michele Shuster 2014-07-15

Scientific American Biology for a Changing Word - Kerry S. Kilburn 2011-03-01

Scientific American: Presenting Psychology - Deborah Licht 2018-12-11
In this breakthrough student resource, two committed, tech-savvy professors, Deborah Licht and Misty Hull,

combine years of research and teaching insights with the journalistic skill of science writer, Coco Ballantyne, who came to the project directly from Scientific American. Together, they have created an introductory psychology textbook and online learning and comprehension system that draws on written profiles and video interviews of 26 real people to help students better understand, remember, apply, and relate to psychology's foundational concepts and ideas. Beautifully designed, the printed text is filled with high-interest examples and features, including full-page infographics that help students understand and retain key concepts. Online, additional author-created resources, including scaffolded activities and adaptive quizzes, provide a seamless learning experience for students and a reliable assessment mechanism for instructors and programs. This innovative collaboration between Worth Publishers and Scientific American reflects a commitment to engaging and educating all students, including those who sometimes seem difficult to engage—in the contemporary style of the world's most respected science magazine. Along with student engagement with the personal stories, Presenting Psychology 2e also aims to: Demonstrate that psychology is a science Help students see the "big picture" Provide high-quality accessible visuals that make a difference! Illustrate real-world applications Maintain a positive perspective of psychology Emphasize gender and cultural diversity Help dispel myths Provide quality assessments Create interactive, technology-based learning that appeals to students

Loose-Leaf Version for Scientific American: Biology for a Changing World - Michele Shuster 2017-12-22

From the groundbreaking partnership of Macmillan Learning and Scientific American comes this one-of-a-kind introduction to the science of biology and its impact on the way we live. In Biology for a Changing World, two experienced educators and a science journalist explore the core ideas of biology through chapters written and illustrated in the style of a Scientific American article. Chapters don't just feature compelling stories of real people--each chapter is a newsworthy story that serves as a context for covering the standard curriculum for the non-majors biology course. Updated throughout, the new edition offers new stories, enhanced plant and diversity coverage, and an expanded media program. Biology for a Changing World is supported by its own dedicated (and fully updated) version of LaunchPad, which fully integrates an interactive e-Book, all student media, a wide range of assessment and course management features.

This View of Life - David Sloan Wilson 2019-02-26

It is widely understood that Charles Darwin's theory of evolution completely revolutionized the study of biology. Yet, according to David Sloan Wilson, the Darwinian revolution won't be truly complete until it is applied more broadly—to everything associated with the words "human," "culture," and "policy." In a series of engaging and insightful examples—from the breeding of hens to the timing of cataract surgeries to the organization of an automobile plant—Wilson shows how an evolutionary worldview provides a practical tool kit for understanding not only genetic evolution but also the fast-paced changes that are having an impact on our world and ourselves. What emerges is an incredibly empowering argument: If we can become wise managers of evolutionary processes, we can solve the problems of our age at all scales—from the efficacy of our groups to our

well-being as individuals to our stewardship of the planet Earth.

Launchpad for Scientific American Biology for a Changing World Six-months Access - Michele Shuster 2020-05-21

Viruses - Arnold Jay Levine 1992

Discusses the enormous scientific and medical contributions that have come from the field of virology.

Life at the Edge - Gould James L. 1989

Scientific American Biology for a Changing World - Michele Shuster 2018-02-15

This is a one-of-a-kind introduction to the science of biology and its impact on the way we live. In Biology for a Changing World, two experienced educators and a science journalist explore the core ideas of biology through chapters written and illustrated in the style of a Scientific American article. Chapters don’t just feature compelling stories of real people—each chapter is a newsworthy story that serves as a context for covering the standard curriculum for the non-majors biology course. Updated throughout, the new edition offers new stories, enhanced plant and diversity coverage, and an expanded media program. Biology for a Changing World is supported by its own dedicated (and fully updated) version of LaunchPad, which fully integrates an interactive e-Book, all student media, a wide range of assessment and course management features.

Biology Scientific American Reader - Sasi 1999-12-01

Feathers - Thor Hanson 2011-05-31

Feathers are an evolutionary marvel: aerodynamic, insulating, beguiling. They date back more than 100 million years. Yet their story has never been fully told. In Feathers, biologist Thor Hanson details a sweeping natural history, as feathers have been used to fly, protect, attract, and adorn through time and place. Applying the research of paleontologists, ornithologists, biologists, engineers, and even art historians, Hanson asks: What are feathers? How did they evolve? What do they mean to us? Engineers call feathers the most efficient insulating material ever discovered, and they are at the root of biology's most enduring debate. They silence the flight of owls and keep penguins dry below the ice. They have decorated queens, jesters, and priests. And they have inked documents from the Constitution to the novels of Jane Austen. Feathers is a captivating and beautiful exploration of this most enchanting object.

The War on Science - Shawn Otto 2016-06-07

An “insightful” and in-depth look at anti-science politics and its deadly results (Maria Konnikova, New York Times–bestselling author of The Biggest Bluff). Thomas Jefferson said, “Wherever the people are well informed, they can be trusted with their own government.” But what happens when they aren’t? From climate change to vaccinations, transportation to technology, health care to defense, we are in the midst of an unprecedented expansion of scientific progress—and a simultaneous expansion of danger. At the very time we need them most, scientists and the very idea of objective knowledge are being bombarded by a vast, well-funded war on science, and the results are deadly. Whether it’s driven by identity politics, ideology, or industry, the result is an unprecedented erosion of thought in Western democracies as voters, policymakers, and justices actively ignore scientific evidence, leaving major policy decisions to be based more on the

demands of the most strident voices. This compelling book investigates the historical, social, philosophical, political, and emotional reasons why evidence-based politics are in decline and authoritarian politics are once again on the rise on both left and right—and provides some compelling solutions to bring us to our collective senses, before it's too late. “If you care about attacks on climate science and the rise of authoritarianism, if you care about biased media coverage and shake-your-head political tomfoolery, this book is for you.”—The Guardian

The Secrets of Consciousness - Scientific American Editors 2013-11-18

The Secrets of Consciousness by the Editors of Scientific American Consciousness is an enigmatic beast. It's more than mere awareness – it's how we experience the world, how our subjective experience relates to the objective universe around us. And therein lies the rub, in that tiny little word "how." These kinds of questions were once the province of philosophy, religion or perhaps fantasy, but within the last few decades, neuroscientists have added a scientific voice to the discussion, using available medical technology to explore just what separates so-called "mind" from brain. How do the neural and chemical workings of our brains create our minds, our total experience of the world, our thoughts and feelings, and that sense of self that distinguishes the individual from everyone else? In this eBook, The Secrets of Consciousness, we look at what science has to say about one of humankind's most fundamental, existential mysteries. We begin at the beginning, as they say, with Section 1 on the very nature of consciousness and move on to discuss theories of neural development. In one article, author David Chalmers calls this the "hard problem," requiring an entirely new theory that places consciousness itself as a fundamental component akin to the forces of physics. In another, leading neuroscientists Christof Koch and Susan Greenfield debate exactly how the neurons and circuits in the brain create conscious awareness. Later sections go deeper into the rabbit hole and examine what we can learn from altered states such as hypnosis or anesthesia as well as the use of formerly blacklisted hallucinogens such as LSD as healing drugs. Gary Stix discusses one study on the possible therapeutic effects of LSD on the intense anxiety experienced by patients with life-threatening disease, such as cancer. Finally, Section 6 explores "The Enigma of Spirituality." David Biello takes on the search in his article, "God in the Brain," highlighting studies searching for specific neurological centers of spirituality. It's been said before, but the brain is the final frontier. Just how that brain creates not only awareness, but also integrates that awareness into creating experiences, memories, and an enduring sense of self—well, it might take overhauling not only how we study ourselves, but how we define our reality in the process of looking.

The Scientific American Day in the Life of Your Brain - Judith Horstman 2009-08-13

Have you ever wondered what’s happening in your brain as you go through a typical day and night? This fascinating book presents an hour-by-hour round-the-clock journal of your brain’s activities. Drawing on the treasure trove of information from Scientific American and Scientific American Mind magazines as well as original material written specifically for this book, Judith Horstman weaves together a compelling description of your brain at work and at play. The Scientific American Day in the

Life of Your Brain reveals what’s going on in there while you sleep and dream, how your brain makes memories and forms addictions and why we sometimes make bad decisions. The book also offers intriguing information about your emotional brain, and what’s happening when you’re feeling love, lust, fear and anxiety—and how sex, drugs and rock and roll tickle the same spots. Based on the latest scientific information, the book explores your brain’s remarkable ability to change, how your brain can make new neurons even into old age and why multitasking may be bad for you. Your brain is uniquely yours – but research is showing many of its day-to-day cycles are universal. This book gives you a look inside your brain and some insights into why you may feel and act as you do. The Scientific American Day in the Life of Your Brain is written in the entertaining, informative and easy-to-understand style that fans of Scientific American and Scientific American Mind magazine have come to expect.

Biology of the Brain - Rodolfo R. Llinas 1988

The Scientific American Brave New Brain - Judith Horstman 2010-02-25

This fascinating and highly accessible book presents fantastic but totally feasible projections of what your brain may be capable of in the near future. It shows how scientific breakthroughs and amazing research are turning science fiction into science fact. In this brave new book, you'll explore: How partnerships between biological sciences and technology are helping the deaf hear, the blind see, and the paralyzed communicate. How our brains can repair and improve themselves, erase traumatic memories How we can stay mentally alert longer—and how we may be able to halt or even reverse Alzheimers How we can control technology with brain waves, including prosthetic devices, machinery, computers—and even spaceships or clones. Insights into how science may cure fatal diseases, and improve our intellectual and physical productivity Judith Horstman presents a highly informative and entertaining look at the future of your brain, based on articles from Scientific American and Scientific American Mind magazines, and the work of today’s visionary neuroscientists.

Biology for a Changing World - Michele Shuster 2014-03-07

From the groundbreaking partnership of W. H. Freeman and Scientific American comes this one-of-a-kind introduction to the science of biology and its impact on the way we live. In Biology for a Changing World, two experienced educators and a science journalist explore the core ideas of biology through a series of chapters written and illustrated in the style of a Scientific American article. Chapters don’t just feature compelling stories of real people—each chapter is a newsworthy story that serves as a context for covering the standard curriculum for the non-majors biology course. Updated throughout, the new edition offers new stories, additional physiology chapters, a new electronic Instructor's Guide, and new pedagogy.

What Darwin Got Wrong - Jerry Fodor 2011-02-24

Jerry Fodor and Massimo Piatelli-Palmarini, a distinguished philosopher and scientist working in tandem, reveal major flaws at the heart of Darwinian evolutionary theory. They do not deny Darwin's status as an outstanding scientist but question the inferences he drew from his observations. Combining the results of cutting-edge work in experimental biology with crystal-

clear philosophical argument they mount a devastating critique of the central tenets of Darwin's account of the origin of species. The logic underlying natural selection is the survival of the fittest under changing environmental pressure. This logic, they argue, is mistaken. They back up the claim with evidence of what actually happens in nature. This is a rare achievement - the short book that is likely to make a great deal of difference to a very large subject. What Darwin Got Wrong will be controversial. The authors' arguments will reverberate through the scientific world. At the very least they will transform the debate about evolution.

Survival of the Beautiful - David Rothenberg 2013-01-01

'The peacock's tail makes me sick!' said Charles Darwin. That's because the theory of evolution as adaptation can't explain why nature is so beautiful. It took the concept of sexual selection for Darwin to explain that, a process that has more to do with aesthetic taste than adaptive fitness. Survival of the Beautiful is a revolutionary new examination of the interplay of beauty, art, and culture in evolution. Taking inspiration from Darwin's observation that animals have a natural aesthetic sense, philosopher and musician David Rothenberg probes why animals, humans included, have an innate appreciation for beauty - and why nature is, indeed, beautiful.

Science on a Mission - Naomi Oreskes 2021-04-19

A vivid portrait of how Naval oversight shaped American oceanography, revealing what difference it makes who pays for science. What difference does it make who pays for science? Some might say none. If scientists seek to discover fundamental truths about the world, and they do so in an objective manner using well-established methods, then how could it matter who’s footing the bill? History, however, suggests otherwise. In science, as elsewhere, money is power. Tracing the recent history of oceanography, Naomi Oreskes discloses dramatic changes in American ocean science since the Cold War, uncovering how and why it changed. Much of it has to do with who pays. After World War II, the US military turned to a new, uncharted theater of warfare: the deep sea. The earth sciences—particularly physical oceanography and marine geophysics—became essential to the US Navy, which poured unprecedented money and logistical support into their study. Science on a Mission brings to light how this influx of military funding was both enabling and constricting: it resulted in the creation of important domains of knowledge but also significant, lasting, and consequential domains of ignorance. As Oreskes delves into the role of patronage in the history of science, what emerges is a vivid portrait of how naval oversight transformed what we know about the sea. It is a detailed, sweeping history that illuminates the ways funding shapes the subject, scope, and tenor of scientific work, and it raises profound questions about the purpose and character of American science. What difference does it make who pays? The short answer is: a lot.

Scientific American Current Issues in Cell and Molecular Biology and Genetics - Scientific American, inc 2006-02-01

Give your students the best of both worlds-the most current, interesting applications in cell biology, genetics, and molecular biology paired with the authority, reliability, and clarity of Benjamin Cummings' texts. This exclusive special supplement from Scientific American is available at no additional cost when packaged with select Benjamin Cummings titles. Each

article was carefully chosen to match the level of your course, and to capture some of the most exciting developments in biology today-from gene therapy to a potentially looming influenza pandemic and more. Also included are end of chapter comprehension and discussion questions for both cell biology and genetics.

Your Atomic Self - Curt Stager 2014-10-14

What do atoms have to do with your life? In Your Atomic Self, scientist Curt Stager reveals how they connect you to some of the most amazing things in the universe. You will follow your oxygen atoms through fire and water and from forests to your fingernails. Hydrogen atoms will wriggle into your hair and betray where you live and what you have been drinking. The carbon in your breath will become tree trunks, and the sodium in your tears will link you to long-dead oceans. The nitrogen in your muscles will help to turn the sky blue, the phosphorus in your bones will help to turn the coastal waters of North Carolina green, the calcium in your teeth will crush your food between atoms that were mined by mushrooms, and the iron in your blood will kill microbes as it once killed a star. You will also discover that much of what death must inevitably do to your body is already happening among many of your atoms at this very moment and that, nonetheless, you and everyone else you know will always exist somewhere in the fabric of the universe. You are not only made of atoms; you are atoms, and this book, in essence, is an atomic field guide to yourself.

Scientific American Biology for a Changing World - Michele Shuster 2018-03-15

Two experienced educators and a science journalist explore the core ideas of biology through chapters written and illustrated in the style of a Scientific American article. Chapters don’t just feature compelling stories of real people—each chapter is a newsworthy story that serves as a context for covering the standard curriculum for the non-majors biology course. Scientific American Biology for a Changing World is available with LaunchPad. LaunchPad combines an interactive ebook with high-quality multimedia content and ready-made assessment options, including LearningCurve adaptive quizzing. See ‘Instructor Resources’ and ‘Student Resources’ for further information.

Loose-leaf Version for Environmental Science for a Changing World (Canadian Edition) - Karen Ing 2014-07-15

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.

How to Raise Kids Who Aren't Assholes - Melinda Wenner Moyer 2022-06-21

How to Raise Kids Who Aren't Assholes is a clear, actionable, sometimes humorous (but always science-based) guide for parents on how to shape their kids into honest, kind, generous, confident, independent, and resilient people...who just might save the world one day. As an award-winning science journalist, Melinda Wenner Moyer was regularly asked to investigate and address all kinds of parenting questions: how to potty train, when and whether to get vaccines, and how to help kids sleep through the night. But as Melinda's children grew, she found that one huge area was ignored in the realm of parenting advice: how do we make sure our kids don't grow up to be assholes? On social media, in the

news, and from the highest levels of government, kids are increasingly getting the message that being selfish, obnoxious and cruel is okay. Hate crimes among children and teens are rising, while compassion among teens has been dropping. We know, of course, that young people have the capacity for great empathy, resilience, and action, and we all want to bring up kids who will help build a better tomorrow. But how do we actually do this? How do we raise children who are kind, considerate, and ethical inside and outside the home, who will grow into adults committed to making the world a better place? How to Raise Kids Who Aren't Assholes is a deeply researched, evidence-based primer that provides a fresh, often surprising perspective on parenting issues, from toddlerhood through the teenage years. First, Melinda outlines the traits we want our children to possess—including honesty, generosity, and antiracism—and then she provides scientifically-based strategies that will help parents instill those characteristics in their kids. Learn how to raise the kind of kids you actually want to hang out with—and who just might save the world.

Scientific American, Simple Science Fair Projects, Grades 3-5 - Bob Friedhoffer 2018-07-03

EVERYTHING YOU NEED TO KNOW FOR SIMPLE SCIENCE FAIR PROJECTS Learn Experiments that help you to: Store and release energy Remove heat from an object Understand how a jet engine works Build and operate a siphon Featuring experiments in: Gravity Energy Air and Water Pressure Friction Motion Light Perception Biology Grades 3-5

Genes and the Biology of Cancer - Harold Varmus 1993-01-01

Discusses advances in cancer research and shows how research into the causes of cancer have led to a greater understanding of the normal biological functioning of cells

The End Of Science - John Horgan 2015-04-14

As staff writer for Scientific American, John Horgan has a window on contemporary science unsurpassed in all the world. Who else routinely interviews the likes of Lynn Margulis, Roger Penrose, Francis Crick, Richard Dawkins, Freeman Dyson, Murray Gell-Mann, Stephen Jay Gould, Stephen Hawking, Thomas Kuhn, Chris Langton, Karl Popper, Stephen Weinberg, and E.O. Wilson, with the freedom to probe their innermost thoughts? In The End Of Science, Horgan displays his genius for getting these larger-than-life figures to be simply human, and scientists, he writes, "are rarely so human . . . so at there mercy of their fears and desires, as when they are confronting the limits of knowledge."This is the secret fear that Horgan pursues throughout this remarkable book: Have the big questions all been answered? Has all the knowledge worth pursuing become known? Will there be a final "theory of everything" that signals the end? Is the age of great discoverers behind us? Is science today reduced to mere puzzle solving and adding detains to existing theories? Horgan extracts surprisingly candid answers to there and other delicate questions as he discusses God, Star Trek, superstrings, quarks, plectics, consciousness, Neural Darwinism, Marx's view of progress, Kuhn's view of revolutions, cellular automata, robots, and the Omega Point, with Fred Hoyle, Noam Chomsky, John Wheeler, Clifford Geertz, and dozens of other eminent scholars. The resulting narrative will both infuriate and delight as it mindless Horgan's smart, contrarian argument for "endism" with a witty, thoughtful, even profound overview of the entire scientific enterprise. Scientists have always set

themselves apart from other scholars in the belief that they do not construct the truth, they discover it. Their work is not interpretation but simple revelation of what exists in the empirical universe. But science itself keeps imposing limits on its own power. Special relativity prohibits the transmission of matter or information as speeds faster than that of light; quantum mechanics dictates uncertainty; and chaos theory confirms the impossibility of complete prediction. Meanwhile, the very idea of scientific rationality is under fire from Neo-Luddites, animal-rights activists, religious fundamentalists, and New Agers alike. As Horgan makes clear, perhaps the greatest threat to science may come from losing its special place in the hierarchy of disciplines, being reduced to something more akin to literaty criticism as more and more theoreticians engage in the theory twiddling he calls "ironic science." Still, while Horgan offers his critique, grounded in the thinking of the world's leading researchers, he offers homage too. If science is ending, he maintains, it is only because it has done its work so well.

Biology and Culture in Modern Perspective - Joseph G. Jorgensen 1972-01-01

Study Guide to Accompany Scientific American Biology for a Changing World with Core Physiology - Kerry S. Kilburn 2012

Scientific American Biology for a Changing World with Core Physiology - Matthew Tontonoz 2014-03-14

From the groundbreaking partnership of W. H. Freeman and Scientific American comes this one-of-a-kind introduction to the science of biology and its impact on the way we live. In this textbook, two experienced educators and a science journalist explore the core ideas of biology through a series of chapters written and illustrated in the style of a Scientific American article. Chapters don’t just feature compelling stories of real people—each chapter is a newsworthy story that serves as a context for covering the standard curriculum for the non-majors biology course. Updated throughout, the new edition offers new stories, additional physiology chapters, a new Electronic Teachers’ Edition, and new pedagogy. This textbook is available with LaunchPad. LaunchPad combines an interactive ebook with high-quality multimedia content and ready-made assessment options, including LearningCurve adaptive quizzing. See ‘Instructor Resources’ and ‘Student Resources’ for further information.

Scientific American Biology for a Changing World - Michele Shuster 2011-02-25

To view sample chapters and more information visit www.whfreeman.com/SABiologyPreview All of us involved in science education understand the importance of scientific literacy. How do we get the attention of a nonscientist? And if we can get it, how do we keep it - not only for the duration of the course or the chapter in a textbook but beyond? How do we convey in our courses and our textbooks not just what we know but also how science is done? These are the challenges we hope to address with our new series of textbooks specifically for the nonscientist. With this series, W. H. Freeman and Scientific American join forces not just to engage nonscientists but to equip them critical life tools.

Behavior of the Lower Organisms - Herbert Spencer Jennings 1906

Scientific American Biology for a Changing World with Core Physiology - Michele Shuster 2021-04-26
From the groundbreaking partnership of Macmillan Learning and Scientific American comes this one-of-a-kind introduction to the science of biology and its impact on the way we live. Available for the first time with Macmillan's new online learning tool, Achieve, Biology for a Changing World explores the core ideas of biology through chapters written and illustrated in the style of a Scientific American article. Chapters don't just feature compelling stories of real people—each chapter is a newsworthy story that serves as a context for covering the standard curriculum for the non-majors biology course. Achieve is Macmillan's new online learning platform that supports educators and students throughout the full range of instruction, including assets suitable for pre-class preparation, in-class active learning, and post-class study and assessment. The pairing of a powerful new platform with outstanding biology content provides an unrivaled learning experience.
Scientific American Nutrition for a Changing World - Jamie Pope 2018-12-28
Nutrition for a Changing World engages students like no other nutrition textbook. Real stories – about real people and real science – are integrated into every chapter, bringing context and relevance to the core science. Infographics in the style of Scientific American magazine are like "science storyboards" that guide students step-by-step through essential processes and concepts. Coverage of timely topics such as gluten-free diets, the diabetes epidemic, and global nutrition exemplify the book's contemporary approach to nutrition science. Nutrition for Changing World is also the only product for the course to offer automatically graded diet analysis activities. AnalyzeMyDiet provides both a diet tracker and personalized, auto-graded diet analysis activities built to cover a standard 3- to 7-day diet analysis assignment, freeing instructors from hand-grading these projects.
Evolution - Scientific American 2008-09-15
From the Scopes "Monkey Trial" of 1925 to the court ruling against the Dover Area School Board's proposed intelligent design curriculum in 2005, few scientific topics have engendered as much controversy—or grabbed as many headlines—as evolution. And since the debate shows no signs of abating, there is perhaps no better time to step back and ask: What is evolution? Defined as the gradual process by which something changes into a different and usually more complex and efficient form, evolution explains the formation of the universe, the nature of viruses, and the emergence of humans. A first-rate summary of the actual science of evolution, this Scientific American reader is a timely collection that gives readers an opportunity to consider evolution's impact in various settings. Divided into four sections that consider the evolution of the universe, cells, dinosaurs, and humans, Evolution brings together more than thirty articles written by some of the world's most respected evolutionary scientists. As tour guides through the genesis of the universe and complex cells, P. James E. Peebles examines the evidence in support of an expanding cosmos, while Christian de Duve discusses the birth of eukaryotes. In an article that anticipated his book Full House, Stephen Jay Gould argues that chance and contingency are as important as natural selection for evolutionary change. And Ian Tatersall makes two fascinating contributions, submitting his view

that the schematic of human evolution looks less like a ladder and more like a bush. With the latest on what’s being researched at every level of evolutionary studies, from prospects of life on other planets to the inner working of cells, Evolution offers general readers an opportunity to update their knowledge on this hot topic while giving students an introduction to the problems and methodologies of an entire field of inquiry.

Live Long and Evolve - Mohamed A. F. Noor 2020-02-25

"In Star Trek, crew members travel to unusual planets, meet diverse beings, and encounter unique civilizations. In these remarkable space adventures, does Star Trek reflect biology and evolution as we know it? What can the science in the science fiction of Star Trek teach us?"--Back cover

Dragonflies - Pieter van Dokkum 2015-01-01

Fotoboek met close-up foto's van libellen.

Microcosm - Carl Zimmer 2012-12-31

In 1946, a twenty-year-old medical school student called Joshua Lederberg decided to find out whether microbes make love. Lederberg was motivated not by a displaced libido, but by scientific ambition. At the age of seven, he had declared that he hoped to become 'like Einstein' and to 'discover a few things in science.' The 'few things' Lederberg discovered would revolutionise modern science and earn him a Nobel Prize. He chose to observe the breeding habits of a certain bacterium called Escherichia coli, better known as E coli. His experiments used defective E coli strains lacking the essential molecules to reproduce by cloning which should, by rights, perish in the petri dish. But slowly, a few colonies of survivors began to spread accross the dishes. The only possible explanation for their survival was that they were a product of sex. Not only had Lederberg proved that bacteria have sex, he had also proved they have genes. Since then, a bacterium that was once nothing more than a humble resident of the human gut has become our best guide to what it means to be alive. Most of us might only know E coli for its lethal strain that causes food poisoning, but Zimmer uses E coli as a prism to understand what life is, what it was, and what it will become. We learn how E coli microbes talk to each other, how studies of their evolution represent the most powerful evidence in support of natural selection, and how they might just explain life on other planets...