The Origin Of Our Species

Today many school students are shielded from one of the most important concepts in modern science: evolution. In engaging and conversational style, Teaching About Evolution and the Nature of Science provides a well-structured framework for understanding and teaching evolution. Written for teachers, parents, and community officials as well as scientists and educators, this book describes how evolution reveals both the great diversity and similarity among the Earth's organisms; it explores how scientists approach the question of evolution; and it illustrates the nature of science as a way of knowing about the natural world. In addition, the book provides answers to frequently asked questions to help readers understand many of the issues and misconceptions about evolution. The book includes sample activities for teaching about evolution and the nature of science. For example, the book includes activities that investigate fossil footprints and population growth that teachers of science can use to introduce principles of evolution. Background information, materials, and step-by-step presentations are provided for each activity. In addition, this volume: Presents the evidence for evolution, including how evolution can be observed today. Explains the nature of science through a variety of examples. Describes how science

differs from other human endeavors and why evolution is one of the best avenues for helping students understand this distinction. Answers frequently asked questions about evolution. Teaching About Evolution and the Nature of Science builds on the 1996 National Science Education Standards released by the National Research Council--and offers detailed guidance on how to evaluate and choose instructional materials that support the standards. Comprehensive and practical, this book brings one of today's educational challenges into focus in a balanced and reasoned discussion. It will be of special interest to teachers of science, school administrators, and interested members of the community.

In this ground-breaking book Chris Stringer sets out to answer all the big questions in the debate about our origins. How can we define modern humans, and how can we recognise our beginnings in the fossil and archaeological record? How can we accurately date fossils, including ones beyond the range of radiocarbon dating? What does the genetic data really tell us? Were our origins solely in Africa? Are modern humans a distinct species from ancient people such as the Neanderthals? And what contact did our ancestors have with them? How can we recognise modern humans behaviourally, and were traits such as complex language and art unique to modern humans? What forces shaped the origins of modern humans - were they climatic, dietary, social, or even volcanic?

What drove the dispersals of modern humans from Africa, and how did our species spread over the globe? How did regional features evolve, and how significant are they? What exactly was the 'Hobbit' of the island of Flores, and how was it related to us? Has human evolution stopped, or are we still evolving? What can we expect from future research on our origins? This book will make every reader think about what it means to be human.

“Meaty, well-written.” —Kirkus Reviews “Timely and informative.” —The New York Times Book Review “By far the best book I have ever read on humanity’s deep history.” —E. O. Wilson, biologist and author of The Ants and On Human Nature Nicholas Wade’s articles are a major reason why the science section has become the most popular, nationwide, in the New York Times. In his groundbreaking Before the Dawn, Wade reveals humanity’s origins as never before—a journey made possible only recently by genetic science, whose incredible findings have answered such questions as: What was the first human language like? How large were the first societies, and how warlike were they? When did our ancestors first leave Africa, and by what route did they leave? By eloquently solving these and numerous other mysteries, Wade offers nothing less than a uniquely complete retelling of a story that began 500 centuries ago.

The Origin of Our SpeciesPenguin Books

“The name Leakey is synonymous with the study of human origins,” wrote The New York Times. The renowned family of paleontologists—Louis Leakey, Mary Leakey, and their son Richard Leakey—has vastly expanded our understanding of human evolution. The Origin of Humankind is Richard Leakey’s personal view of the development of Homo Sapiens. At the heart of his new picture of evolution is the introduction of a heretical notion: once the first apes walked upright, the evolution of modern humans became possible and perhaps inevitable. From this one evolutionary step comes all the other evolutionary refinements and distinctions that set the human race apart from the apes. In fascinating sections on how and why modern humans developed a social organization, culture, and personal behavior, Leakey has much of interest to say about the development of art, language, and human consciousness.

The Origin of Species by Charles Darwin must rank as one of the most influential and consequential books ever published, initiating scientific, social and religious ferment ever since its first publication in 1859. Its full title is The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life, in some editions prefaced by the word “On.” Darwin describes the book as simply an “abstract” of his ideas, which are more fully fleshed out and supported with detailed examples in his other, more scholarly works (for

example, he wrote several long treatises entirely about barnacles). The Origin of Species itself was intended to reach a wider audience and is written in such a way that any reasonably educated and thoughtful reader can follow Darwin's argument that species of animals and plants are not independent creations, fixed for all time, but mutable. Species have been shaped in response to the effects of natural selection, which Darwin compares to the directed or manual selection by human breeders of domesticated animals. The Origin of Species was eagerly taken up by the reading public, and rapidly went through several editions. This Standard Ebooks edition is based on the sixth edition published by John Murray in 1872, generally considered to be the definitive edition with many amendments and updates by Darwin himself. The Origin of Species has never been out of print and continues to be an extremely popular work. Later scientific discoveries such as the breakthrough of DNA sequencing have refined our concept of some of Darwin's ideas and given us a better understanding of issues he found puzzling, but the basic thrust of his theory remains unchallenged. This book is part of the Standard Ebooks project, which produces free public domain ebooks.

Human domination of our earth is now so complete that it is easy to forget how recently our role in the history of our planet began: the earliest apes evolved around 20 million years ago, yet homo sapiens has existed for a mere 160,000

years. In the intervening period, dozens of species of early ape and human have lived and died out, leaving behind the fossilized remains that have helped to build up the detailed picture of our evolution revealed in this book, which has been thoroughly revised throughout and is newly available in paperback. It explores every aspect of the study of ape and human evolution in three accessible sections, lavishly illustrated throughout with photographs, diagrams, timelines and specially commissioned drawings. This compelling and authoritative account is essential reading for anyone interested in, or studying, the story of human origins.

Why are humans so fond of water? Why is our skin colour so variable? Why aren't we hairy like our close ape relatives? A savannah scenario of human evolution has been widely accepted primarily due to fossil evidence; and fossils do not offer insight into these questions. Other alternative evolutionary scenarios might, but these models have been rejected. This book explores a controversial idea – that human evolution was intimately associated with watery habitats as much or more than typical savannahs. Written from a medical point of view, the author presents evidence supporting a credible alternative explanation for how humans diverged from our primate ancestors. Anatomical and physiological evidence offer insight into hairlessness, different coloured skin, subcutaneous fat,

large brains, a marine-type kidney, a unique heat regulation system and speech. This evidence suggests that humans may well have evolved, not just as savannah mammals, as is generally believed, but with more affinity for aquatic habitats – rivers, streams, lakes and coasts. Key Features: Presents the evidence for a close association between riparian habitats and the origin of humans Reviews the "savannah ape" hypothesis for human origins Describes various anatomical adaptations that are associated with hypotheses of human evolution Explores characteristics from the head and neck such as skull and sinus structures, the larynx and ear structures and functions Corroborates a novel scenario for the origin of human kind '... a counterpoint to the textbooks or other books which deal with human evolution. I think readers will see it as a clearly written, well-supported discussion of an alternativeperspective on human origins'. —Kathlyn Stewart, Canadian Museum of Nature, Ottawa 'There is a pressing need to expand discussions of human evolution to includenon-anthropocentric narratives that use comparative data. Dr Rhys-Evans' specific expertise and experience with the human head, neck, ears, throat, mouth and sinuses, provides him with a distinct perspective from which to approach the subject of human evolution. Moreover, his understanding of non-anthropocentric views of human evolution (water-based models), allow him to apply a biological

approach to the subject, missing in more traditional (savannah-based) models'. —Stephen Munro, National Museum of Australia

This book describes a stunning new discovery in the evolution of our species-- the uncovering of a simple, natural equation that can justifiably be called the E = mc squared of biology. This simple equation acts like a pair of magic spectacles, for the first time making visible what have previously been the invisible steps that led to the evolution of our species. It provides a prescription for how modern humans can increase lifespan still further, while at the same time "normalizing" lifetime risk of cancer from its current aberrant 40% to the 4% of other animals on this planet. And it shows why humans cannot colonize Mars, or engage in spaceflight far from Earth. This equation allows us to predict that the Milky Way will be luxuriant with life-- even intelligent life, of the sort exemplified by whales, and Orca, and elephants-- but devoid of our kind of life-- creatures who harnessed fire and used fire to leave their planet and travel into space. This simple equation shows why there are no other space-faring species in our galaxy, or in the local cluster of galaxies, or even to a distance of a million light years from Earth. If you are interested in the past and future evolution of our species-- who we are, where we came from, and who we can become-- then this is a book that you will enjoy.

Chris Stringer's bestselling The Origin of our Species tackles the big questions in the ongoing debate about the beginnings of human life on earth. Do all humans originate from Africa? How did we spread across the globe? Are we separate from Neanderthals, or do some of us actually have their genes? When did humans become 'modern' - are traits such as art, technology, language, ritual and belief unique to us? Has human evolution stopped, or are we

still evolving? Chris Stringer has been involved in much of the crucial research into the origins of humanity, and here he draws on a wealth of evidence - from fossils and archaeology to Charles Darwin's theories and the mysteries of ancient DNA - to reveal the definitive story of where we came from, how we lived, how we got here and who we are. 'A new way of defining us and our place in history' Sunday Times 'When it comes to human evolution Chris Stringer is as close to the horse's mouth as it gets ... The Origin of Our Species should be the one-stop source on the subject. Read it now' BBC Focus 'Britain's foremost expert on human evolution ... you need a primer to make sense of the story so far. Here is that book' Guardian 'Combines anecdote and speculation with crisp explanation of the latest science in the study of the first humans ... an engaging read' New Scientist Chris Stringer is Britain's foremost expert on human origins and works in the Department of Palaeontology at the Natural History Museum. He also currently directs the Ancient Human Occupation of Britain project, aimed at reconstructing the first detailed history of how and when Britain was occupied by early humans. His previous books include African Exodus- The Origins of Modern Humanity, The Complete World of Human Evolutionand most recently, Homo Britannicus, which was shortlisted for the Royal Society Science Book of the Year in 2007.

Charles Darwin’s groundbreaking On the Origin of Species is now available in an accessible, illustrated edition for young readers that includes an introduction, glossary, modern insight and information, and more! Charles Darwin’s famous theory of natural selection shook the world of science to its core, challenging centuries of orthodox beliefs about life itself. Darwin’s boundary-shattering treatise was captured in On the Origin of Species, originally published in 1859, a groundbreaking and detailed study on ecological interrelatedness, the complexity of

animal and plant life, and the realities of evolution. This Young Reader's Edition makes Darwin's cornerstone of modern science accessible to readers of all ages. Meticulously curated to honor Darwin's original text, this compelling edition also provides contemporary insight, photographs, illustrations, and more. This adaptation is a must-have for any reader with a curious mind and the desire to explore one of the most influential books of our time.
Introduction by Edward J. Larson ?Perhaps the most readable and accessible of the great works of scientific inquiry, The Origin of Species sold out its first printing on the very day it was published in 1859. Theologians quickly labeled Charles Darwin the most dangerous man in England and, as the Saturday Review noted, the uproar over the book quickly "passed beyond the bounds of the study and lecture-room into the drawing-room and the public street." Based largely on Darwin's experience as a naturalist while on a five-year voyage aboard H. M. S. Beagle, The Origin of Species set forth a theory of evolution and natural selection that challenged contemporary beliefs about divine providence and the immutability of species. This Modern Library edition includes a Foreword by the Pulitzer Prize–winning science historian Edward J. Larson, an introductory historical sketch, and a glossary Darwin later added to the original text.
In December 2004, the National Academy of Sciences sponsored a colloquium on â€œSystematics and the Origin of Speciesâ€ to celebrate Ernst Mayrâ€™s 100th anniversary and to explore current knowledge concerning the origin of species. In 1942, Ernst Mayr, one of the twentieth centuryâ€™s greatest scientists, published Systematics and the Origin of Species, a seminal book of the modern theory of evolution, where he advanced the significance of population variation in the understanding of evolutionary process and the origin of new

species. Mayr formulated the transition from Linnaeusâ€™s static species concept to the dynamic species concept of the modern theory of evolution and emphasized the species as a community of populations, the role of reproductive isolation, and the ecological interactions between species. In addition to a preceding essay by Edward O. Wilson, this book includes the 16 papers presented by distinguished evolutionists at the colloquium. The papers are organized into sections covering the origins of species barriers, the processes of species divergence, the nature of species, the meaning of â€œspecies,â€ and genomic approaches for understanding diversity and speciation.

In this stunningly original book, Richard Wrangham argues that it was cooking that caused the extraordinary transformation of our ancestors from apelike beings to Homo erectus. At the heart of Catching Fire lies an explosive new idea: the habit of eating cooked rather than raw food permitted the digestive tract to shrink and the human brain to grow, helped structure human society, and created the male-female division of labour. As our ancestors adapted to using fire, humans emerged as "the cooking apes". Covering everything from food-labelling and overweight pets to raw-food faddists, Catching Fire offers a startlingly original argument about how we came to be the social, intelligent, and sexual species we are today. "This notion is surprising, fresh and, in the hands of Richard Wrangham, utterly persuasive ... Big, new ideas do not come along often in evolution these days, but this is one." -Matt Ridley, author of Genome

Modern Humans is a vivid account of the most recent—and perhaps the most important—phase of human evolution: the appearance of anatomically modern people (Homo sapiens) in Africa less than half a million years ago and their later spread throughout the world. Leaving no stone

unturned, John F. Hoffecker demonstrates that Homo sapiens represents a “major transition” in the evolution of living systems in terms of fundamental changes in the role of non-genetic information. Modern Humans synthesizes recent findings from genetics (including the rapidly growing body of ancient DNA), the human fossil record, and archaeology relating to the African origin and global dispersal of anatomically modern people. Hoffecker places humans in the broad context of the evolution of life, emphasizing the critical role of genetic and non-genetic forms of information in living systems as well as how changes in the storage, transmission, and translation of information underlie major transitions in evolution. He also draws on information and complexity theory to explain the emergence of Homo sapiens in Africa several hundred thousand years ago and the rapid and unprecedented spread of our species into a variety of environments in Australia and Eurasia, including the Arctic and Beringia, beginning between 75,000 and 60,000 years ago. This magisterial work will appeal to all with an interest in the ever-fascinating field of human evolution.

Over the last decade, Africa has taken a central position in the search for the timing and mechanisms leading to modern human origins, and the rich archaeological and human paleontological record of North Africa is critical to this search. In this volume, we bring together new research into the archaeology, human paleontology, chronology, and environmental context of modern human origins in North Africa. The result is a volume that better integrates the North African record into the modern human origins debate and at the same time highlights the research questions that are currently the focus of continued work in the area.?

Humans are the only mammals to walk on two, rather than four, legs. From an evolutionary perspective, this is an illogical development, as it slows us down. But here we are, suggesting

there must have been something tremendous to gain from bipedalism.

A Choice Outstanding Academic Book A Library Journal Best Sci-Tech Book A New York Times Notable Book Once in a generation a book such as African Exodus emerges to transform the way we see ourselves. This landmark book, which argues that our genes betray the secret of a single racial stock shared by all of modern humanity, has set off one of the most bitter debates in contemporary science. "We emerged out of Africa," the authors cont, "less than 100,000 years ago and replaced all other human populations." Employing persuasive fossil and genetic evidence (the proof is in the blood, not just the bones) and an exceptionally readable style, Stringer and McKie challenge long-held beliefs that suggest we evolved separately as different races with genetic roots reaching back two million years.

An award-winning Museum of Natural History curator and author of Becoming Human traces the evolution of homo sapiens to demonstrate how they prevailed among other early humans because of their unique cognitive ability, in an account that also explains how their superior mental abilities were acquired. 40,000 first printing.

On the Origin of Species (or, more completely, On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life), [3] published on 24 November 1859, is a work of scientific literature by Charles Darwin which is considered to be the foundation of evolutionary biology.[4] Darwin's book introduced the scientific theory that populations evolve over the course of generations through a process of natural selection. It presented a body of evidence that the diversity of life arose by common descent through a branching pattern of evolution. Darwin included evidence that he had gathered on the Beagle expedition in the 1830s and his subsequent findings from research, correspondence, and

experimentation

How our collective intelligence has helped us to evolve and prosper Humans are a puzzling species. On the one hand, we struggle to survive on our own in the wild, often failing to overcome even basic challenges, like obtaining food, building shelters, or avoiding predators. On the other hand, human groups have produced ingenious technologies, sophisticated languages, and complex institutions that have permitted us to successfully expand into a vast range of diverse environments. What has enabled us to dominate the globe, more than any other species, while remaining virtually helpless as lone individuals? This book shows that the secret of our success lies not in our innate intelligence, but in our collective brains—on the ability of human groups to socially interconnect and learn from one another over generations. Drawing insights from lost European explorers, clever chimpanzees, mobile hunter-gatherers, neuroscientific findings, ancient bones, and the human genome, Joseph Henrich demonstrates how our collective brains have propelled our species' genetic evolution and shaped our biology. Our early capacities for learning from others produced many cultural innovations, such as fire, cooking, water containers, plant knowledge, and projectile weapons, which in turn drove the expansion of our brains and altered our physiology, anatomy, and psychology in crucial ways. Later on, some collective brains generated and recombined powerful concepts, such as the lever, wheel, screw, and writing, while also creating the institutions that continue to alter our motivations and perceptions. Henrich shows how our genetics and biology are inextricably interwoven with cultural evolution, and how culture-gene interactions launched our species on an extraordinary evolutionary trajectory. Tracking clues from our ancient past to the present, The Secret of Our Success explores how the evolution of both our cultural and social

natures produce a collective intelligence that explains both our species' immense success and the origins of human uniqueness.

A leading researcher on human evolution proposes a new and controversial theory of how our species came to be In this groundbreaking and engaging work of science, world-renowned paleoanthropologist Chris Stringer sets out a new theory of humanity's origin, challenging both the multiregionalists (who hold that modern humans developed from ancient ancestors in different parts of the world) and his own "out of Africa" theory, which maintains that humans emerged rapidly in one small part of Africa and then spread to replace all other humans within and outside the continent. Stringer's new theory, based on archeological and genetic evidence, holds that distinct humans coexisted and competed across the African continent—exchanging genes, tools, and behavioral strategies. Stringer draws on analyses of old and new fossils from around the world, DNA studies of Neanderthals (using the full genome map) and other species, and recent archeological digs to unveil his new theory. He shows how the most sensational recent fossil findings fit with his model, and he questions previous concepts (including his own) of modernity and how it evolved. Lone Survivors will be the definitive account of who and what we were, and will change perceptions about our origins and about what it means to be human.

In recent years, China has produced a wealth of hominid fossils that shed new light on the course of human evolution. This book--the first comprehensive treatment of these fossil finds--offers a brief description of Chinese paleoanthropology and documents all major Chinese sites. Original translations of Chinese-language materials and new analyses of numerous fossils are included. Each fossil description includes the fossil name and location of site; how, when, and by whom it was found; a detailed description; archaeological remains at

the site; and floral and faunal content of the site. Students and researchers in human evolution, evolutionary biology, evolutionary anatomy, and archaeology will welcome this much-needed guide to a remarkable treasure trove of fossil remains.

Ten million years ago in tropical Africa, some large primates were finally forced to stand upright and walk on two feet - this would form the beginnings of the human race. This book tells the complete story of the human evolution and the development of mankind.

How our ability to learn from each other has been the essential ingredient to our remarkable success as a species Human beings have evolved to become the most dominant species on Earth. This astonishing transformation is usually explained in terms of cognitive ability—people are just smarter than all the rest. But Robert Boyd argues that culture—our ability to learn from each other—has been the essential ingredient of our remarkable success. He shows how a unique combination of cultural adaptation and large-scale cooperation has transformed our species and assured our survival—making us the different kind of animal we are today. Based on the Tanner Lectures delivered at Princeton University, A Different Kind of Animal features challenging responses by biologist H. Allen Orr, philosopher Kim Sterelny, economist Paul Seabright, and evolutionary anthropologist Ruth Mace, as well as an introduction by Stephen Macedo.

The Complete World of Human Evolution By Chris Stringer

This generously illustrated book tells the story of the human family, showing how our species' physical traits and behaviors evolved over millions of years as our ancestors adapted to dramatic environmental changes. In What Does It Means to Be Human? Rick Potts, director of the Smithsonian's Human Origins Program, and Chris Sloan, National Geographic's

paleoanthropolgy expert, delve into our distant past to explain when, why, and how we acquired the unique biological and cultural qualities that govern our most fundamental connections and interactions with other people and with the natural world. Drawing on the latest research, they conclude that we are the last survivors of a once-diverse family tree, and that our evolution was shaped by one of the most unstable eras in Earth's environmental history. The book presents a wealth of attractive new material especially developed for the Hall's displays, from life-like reconstructions of our ancestors sculpted by the acclaimed John Gurche to photographs from National Geographic and Smithsonian archives, along with informative graphics and illustrations. In coordination with the exhibit opening, the PBS program NOVA will present a related three-part television series, and the museum will launch a website expected to draw 40 million visitors.

"Brimming with ideas. . . . The Origins of Creativity approach[es] creativity scientifically but sensitively, feeling its roots without pulling them out."—Economist In a stirring exploration of human nature recalling his foundational work Consilience, Edward O. Wilson offers a "luminous" (Kirkus Reviews) reflection on the humanities and their integral relationship to science. Both endeavors, Wilson argues, have their roots in human creativity—the defining trait of our species. By studying fields as diverse as paleontology, evolution, and neurobiology, Wilson demonstrates that creative expression began not 10,000 years ago, as we have long assumed, but more than 100,000 years ago in the Paleolithic Age. A provocative investigation into what it means to be human, The Origins of Creativity reveals how the humanities have played an unexamined role in defining our species. With the eloquence, optimism, and pioneering inquiry we have come to expect from our leading biologist, Wilson proposes a

transformational “Third Enlightenment” in which the blending of science and humanities will enable a deeper understanding of our human condition, and how it ultimately originated.
Discover Charles Darwin's most important ideas... When the eminent naturalist Charles Darwin returned from South America on board the H.M.S Beagle in 1836, he brought notes and evidence that would form the basis of his landmark theory: that species evolve by a process of natural selection. This theory, published as The Origin of Species in 1859, is the basis of modern biology and the concept of biodiversity. It also sparked a fierce scientific, religious and philosophical debate that still rages today. WITH AN INTRODUCTION BY DARWIN'S GREAT-GREAT-GRANDDAUGHTER, RUTH PADEL
“Even-handed, up-to-date, and clearly written. . . . If you want to navigate between the Scylla and Charybdis of Neanderthal controversies, you’ll find no better guide.” —Brian Fagan, author of Cro-Magnon In recent years, the common perception of the Neanderthal has been transformed thanks to new discoveries and paradigm-shattering scientific innovations. It turns out that the Neanderthals’ behavior was surprisingly modern: they buried the dead, cared for the sick, hunted large animals in their prime, harvested seafood, and spoke. Meanwhile, advances in DNA technologies have forced a reassessment of the Neanderthals’ place in our own past. For hundreds of thousands of years, Neanderthals evolved in Europe very much in parallel to the Homo sapiens line evolving in Africa, and, when both species made their first forays into Asia, the Neanderthals may even have had the upper hand. Here, Dimitra Papagianni and Michael A. Morse look at the Neanderthals through the full dramatic arc of their existence—from their evolution in Europe to their expansion to Siberia, their subsequent extinction, and ultimately their revival in popular novels, cartoons, cult movies, and TV

commercials.

The hominin fossil record documents a history of critical evolutionary events that have ultimately shaped and defined what it means to be human, including the origins of bipedalism; the emergence of our genus Homo; the first use of stone tools; increases in brain size; and the emergence of Homo sapiens, tools, and culture. The Earth's geological record suggests that some evolutionary events were coincident with substantial changes in African and Eurasian climate, raising the possibility that critical junctures in human evolution and behavioral development may have been affected by the environmental characteristics of the areas where hominins evolved. Understanding Climate's Change on Human Evolution explores the opportunities of using scientific research to improve our understanding of how climate may have helped shape our species. Improved climate records for specific regions will be required before it is possible to evaluate how critical resources for hominins, especially water and vegetation, would have been distributed on the landscape during key intervals of hominin history. Existing records contain substantial temporal gaps. The book's initiatives are presented in two major research themes: first, determining the impacts of climate change and climate variability on human evolution and dispersal; and second, integrating climate modeling, environmental records, and biotic responses. Understanding Climate's Change on Human Evolution suggests a new scientific program for international climate and human evolution studies that involve an exploration initiative to locate new fossil sites and to broaden the geographic and temporal sampling of the fossil and archeological record; a comprehensive and integrative scientific drilling program in lakes, lake bed outcrops, and ocean basins surrounding the regions where hominins evolved and a major investment in climate modeling experiments

for key time intervals and regions that are critical to understanding human evolution.

New York Times Bestseller A Summer Reading Pick for President Barack Obama, Bill Gates, and Mark Zuckerberg From a renowned historian comes a groundbreaking narrative of humanity's creation and evolution—a #1 international bestseller—that explores the ways in which biology and history have defined us and enhanced our understanding of what it means to be "human." One hundred thousand years ago, at least six different species of humans inhabited Earth. Yet today there is only one—homo sapiens. What happened to the others? And what may happen to us? Most books about the history of humanity pursue either a historical or a biological approach, but Dr. Yuval Noah Harari breaks the mold with this highly original book that begins about 70,000 years ago with the appearance of modern cognition. From examining the role evolving humans have played in the global ecosystem to charting the rise of empires, Sapiens integrates history and science to reconsider accepted narratives, connect past developments with contemporary concerns, and examine specific events within the context of larger ideas. Dr. Harari also compels us to look ahead, because over the last few decades humans have begun to bend laws of natural selection that have governed life for the past four billion years. We are acquiring the ability to design not only the world around us, but also ourselves. Where is this leading us, and what do we want to become? Featuring 27 photographs, 6 maps, and 25 illustrations/diagrams, this provocative and insightful work is sure to spark debate and is essential reading for aficionados of Jared Diamond, James Gleick, Matt Ridley, Robert Wright, and Sharon Moalem.

Ancestral DNA, Human Origins, and Migrations describes the genesis of humans in Africa and the subsequent story of how our species migrated to every corner of the globe. Different

phases of this journey are presented in an integrative format with information from a number of disciplines, including population genetics, evolution, anthropology, archaeology, climatology, linguistics, art, music, folklore and history. This unique approach weaves a story that has synergistic impact in the clarity and level of understanding that will appeal to those researching, studying, and interested in population genetics, evolutionary biology, human migrations, and the beginnings of our species. Integrates research and information from the fields of genetics, evolution, anthropology, archaeology, climatology, linguistics, art, music, folklore and history, among others Presents the content in an entertaining and synergistic style to facilitate a deep understanding of human population genetics Informs on the origins and recent evolution of our species in an approachable manner

From the savannas of Africa to modern-day labs for biomechanical analysis and molecular genetics, Smithsonian Intimate Guide to Human Origins reveals how anthropologists are furiously redrawing the human family tree. Their discoveries have spawned a host of new questions: Should chimpanzees be included as a human species? Was it the physical difficulty of human childbirth that encouraged the development of social groups in early human species? Did humans and Neanderthals interbreed? Why did humans supplant Neanderthals in the end? In answering such questions, Smithsonian Intimate Guide to Human Origins sheds new light on one of the most important questions of all: What makes us human?

Contemporary interest in Darwin rises from a general ideal of what Darwin’s books ought to contain: a theory of transformation of species by natural selection. However, a reader opening Darwin’s masterpiece, On the Origin of Species, today may be struck by the fact that this "selectionist" view does not deliver the key to many aspects of the book. Without contesting the

importance of natural selection to Darwinism, much less supposing that a fully-formed "Darwinism" stepped out of Darwin's head in 1859, this innovative volume aims to return to the text of the Origin itself. Revisiting the 'Origin of Species' focuses on Darwin as theorising on the origin of variations; showing that Darwin himself was never a pan-selectionist (in contrast to some of his followers) but was concerned with "other means of modification" (which makes him an evolutionary pluralist). Furthermore, in contrast to common textbook presentations of "Darwinism", Hoquet stresses the fact that On the Origin of Species can lend itself to several contradictory interpretations. Thus, this volume identifies where rival interpretations have taken root; to unearth the ambiguities readers of Darwin have latched onto as they have produced a myriad of Darwinian legacies, each more or less faithful enough to the originator's thought. Emphasising the historical features, complexities and intricacies of Darwin's argument, Revisiting the 'Origin of Species' can be used by any lay readers opening Darwin's On the Origin of Species. This volume will also appeal to students and researchers interested in areas such as Evolution, Natural Selection, Scientific Translations and Origins of Life.

In this ground-breaking book Chris Stringer sets out to answer all the big questions in the debate about our origins. How can we define modern humans, and how can we recognise our beginnings in the fossil and archaeological record? How can we accurately date fossils, including ones beyond the range of radiocarbon dating? What do the genetic data really tell us? Were our origins solely in Africa? Are modern humans a distinct species from ancient people such as the Neanderthals? And what contact did our ancestors have with them? How can we recognise modern humans behaviourally, and were traits such as complex language and art unique to modern humans? What forces shaped the origins of modern humans - were

they climatic, dietary, social, or even volcanic? What drove the dispersals of modern humans from Africa, and how did our species spread over the globe? How did regional features evolve, and how significant are they? What exactly was the 'Hobbit' of the island of Flores, and how was it related to us? Has human evolution stopped, or are we still evolving? What can we expect from future research on our origins? This book will make every reader think about what it means to be human.

“Deftly weaving together science and personal observation, Lee proves an engaging, authoritative guide… of the human condition.” —Kate Wong, editor at Scientific American What can fossilized teeth tell us about our ancient ancestors’ life expectancy? Did farming play a problematic role in the history of human evolution? And what do we have in common with Neanderthals? In this captivating bestseller, Close Encounters with Humankind, paleoanthropologist Sang-Hee Lee explores our greatest evolutionary questions from new and unexpected angles. Through a series of entertaining, bite-sized chapters that combine anthropological insight with cutting-edge science, we gain fresh perspectives into our first hominin ancestors and ways to challenge perceptions about the traditional progression of evolution. With Lee as our guide, we discover that we indeed have always been a species of continuous change.