Alfred Wegener S Theory Of Continental Drift Became Modern

One hundred stereotype maps glazed with the most exquisite human prejudice, especially collected for you by Yanko Tsvetkov, author of the viral Mapping Stereotypes project. Satire and cartography rarely come in a single package but in the Atlas of Prejudice they successfully blend in a work of art that is both funny and thought-provoking. The book is based on Mapping Stereotypes, Yanko Tsvetkov's critically acclaimed project that became a viral Internet sensation in 2009. A reliable weapon against bigots of all kinds, it serves as an inexhaustible source of much needed argumentation and-occasionally-as a nice slab of paper that can be used to smack them across the face whenever reasoning becomes utterly impossible. The Complete Collection version of the Atlas contains all maps from the previously published two volumes and adds twenty five new ones, wrapping the best-selling series in a single extended edition.

Plate tectonics is a revolutionary theory on a par with modern genetics. Yet, apart from the frequent use of clichés such as 'tectonic shift' by economists, journalists, and politicians, the science itself is rarely mentioned and poorly understood. This book explains modern plate tectonics in a non-technical manner, showing not only how it accounts for phenomena such as great earthquakes, tsunamis, and volcanic eruptions, but also how it controls conditions at the Earth's surface, including global geography and climate. The book presents the advances that have been made since the establishment of plate tectonics in the 1960s, highlighting, on the 50th anniversary of the theory, the contributions of a small number of scientists who have never been widely recognized for their discoveries. Beginning with the publication of a short article in

Nature by Vine and Matthews, the book traces the development of plate tectonics through two generations of the theory. First generation plate tectonics covers the exciting scientific revolution of the 1960s and 1970s, its heroes and its villains. The second generation includes the rapid expansions in sonar, satellite, and seismic technologies during the 1980s and 1990s that provided a truly global view of the plates and their motions, and an appreciation of the role of the plates within the Earth 'system'. The final chapter bring us to the cutting edge of the science, and the latest results from studies using technologies such as seismic tomography and high-pressure mineral physics to probe the deep interior. Ultimately, the book leads to the startling conclusion that, without plate tectonics, the Earth would be as lifeless as Venus.

"The author of the theory of continental drift - the direct ancestor of the modern theory of plate tectonics and one of the key scientific concepts of the past century - Wegener also made major contributions to geology, geophysics, astronomy, geodesy, atmospheric physics, meteorology, and glaciology. Remarkably, he completed this pathbreaking work while grappling variously with financial difficulty, war, economic depression, scientific isolation, illness, and injury. He ultimately died of overexertion on a journey to probe the Greenland icecap and calculate its rate of drift. Greene places Wegener’s upbringing and theoretical advances in earth science in the context of his brilliantly eclectic career, bringing Wegener to life by analyzing his published scientific work, delving into all of his surviving letters and journals, and tracing both his passionate commitment to science and his thrilling experiences as a polar explorer, a military officer during World War I, and a world-record–setting balloonist."--From publisher description.

Science is fantastic. It tells us about the infinite reaches of

space, the tiniest living organism, the human body, the history of Earth. People have always been doing science because they have always wanted to make sense of the world and harness its power. From ancient Greek philosophers through Einstein and Watson and Crick to the computer-assisted scientists of today, men and women have wondered, examined, experimented, calculated, and sometimes made discoveries so earthshaking that people understood the world—or themselves—in an entirely new way. This inviting book tells a great adventure story: the history of science. It takes readers to the stars through the telescope, as the sun replaces the earth at the center of our universe. It delves beneath the surface of the planet, charts the evolution of chemistry's periodic table, introduces the physics that explain electricity, gravity, and the structure of atoms. It recounts the scientific quest that revealed the DNA molecule and opened unimagined new vistas for exploration. Emphasizing surprising and personal stories of scientists both famous and unsung, A Little History of Science traces the march of science through the centuries. The book opens a window on the exciting and unpredictable nature of scientific activity and describes the uproar that may ensue when scientific findings challenge established ideas. With delightful illustrations and a warm, accessible style, this is a volume for young and old to treasure together.

A collection of essays and articles provides a study of how the planet works, discussing Earth's structure, geographical features, geologic history, and evolution.

Traces the changing theories about continental drift due to the advances in seismology and experimental studies of the behavior of rocks under high pressure. Continental stability was the prevailing scientific view until the late 1960s, when geologists throughout the world became

convinced that crustal plates, both continental and oceanic, have moved over many degrees of latitude and longitude since the Cretaceous period.

Examines the evolution of plate tectonic theory from its beginnings as a wild idea of drifting continents to its acceptance as the main concept that drives geology today.

This book provides an overview of the history of plate tectonics, including in-context definitions of the key terms. It explains how the forerunners of the theory and how scientists working at the key academic institutions competed and collaborated until the theory coalesced.

In this clear and comprehensive introduction to developments in geological theory during the nineteenth century, Mott T. Greene asserts that the standard accounts of nineteenth-century geology, which dwell on the work of Anglo-American scientists, have obscured the important contributions of Continental geologists; he balances this traditional emphasis with a close study of the innovations of the French, German, Austro-Hungarian, and Swiss geologists whose comprehensive theory of earth history actually dominated geological thought of the time. Greene's account of the Continental scientists places the history of geology in a new light: it demonstrates that scientific interest in the late nineteenth century shifted from uniform and steady processes to periodic and cyclic events—rather than the other way around, as the Anglo-American view has represented it. He also puts continental drift theory in its context, showing that it was not a revolutionary idea but one that emerged naturally from the Continental geologists'

foremost subject of study-the origin of mountains, oceans, and continents. A careful inquiry into the nature of geology as a field poised between natural history and physical science, Geology in the Nineteenth Century will interest students and scholars of geology, geophysics, and geography as well as intellectual historians and historians of science.

The popular Makers of Modern Science series is back in print, with both brand-new and revised titles. Each informative, engaging volume presents the intriguing life and remarkable accomplishments of a prominent 20th-century scientist whose outstanding contributions to his or her field have garnered worldwide respect and recognition. Titles in the series profile men and women renowned for their advances in fields spanning genetics, rocket technology, atomic theory, medicine, and more--exploring both their personal and professional achievements. The revised editions include new material that brings the profiles up to date, and all titles feature invaluable new features such as a chronology and Internet resources, in addition to an index, glossary, further reading, sidebars, and black-and-white photographs and line illustrations.

In 1915 Alfred Wegener's seminal work describing the continental drift was first published in German. Wegener explained various phenomena of historical geology, geomorphy, paleontology, paleoclimatology, and similar areas in terms of continental drift. This edition includes new data to support his theories, helping to refute the opponents of his controversial views. 64 illustrations.

Text To Accompany The Physiographic Diagram Of The

North Atlantic. The Geological Society Of America Special Paper, No. 65.

Discusses plate tectonics, the theory that the surface of the earth is always moving, and the connection of this phenomenon to earthquakes and volcanoes.

"Physical Geology is a comprehensive introductory text on the physical aspects of geology, including rocks and minerals, plate tectonics, earthquakes, volcanoes, glaciation, groundwater, streams, coasts, mass wasting, climate change, planetary geology and much more. It has a strong emphasis on examples from western Canada, especially British Columbia, and also includes a chapter devoted to the geological history of western Canada. The book is a collaboration of faculty from Earth Science departments at Universities and Colleges across British Columbia and elsewhere"--BCcampus website.

Why did American geologists reject the notion of continental drift, first posed in 1915? And why did British scientists view the theory as a pleasing confirmation? This text, based on archival resources, provides answers to these questions.

Fifty years ago, no one could explain mountains. Arguments about their origin were spirited, to say the least. Progressive scientists were ridiculed for their ideas. Most geologists thought the Earth was shrinking. Contracting like a hot ball of iron, shrinking and exposing ridges that became mountains. Others were quite sure the planet was expanding. Growth widened sea basins and raised mountains. There was yet another idea, the theory that the world's crust was broken into big plates that jostled around, drifting until they collided and jarred mountains into existence. That idea was invariably dismissed as pseudo-science. Or "utter damned rot" as one

prominent scientist said. But the doubtful theory of plate tectonics prevailed. Mountains, earthquakes, ancient ice ages, even veins of gold and fields of oil are now seen as the offspring of moving tectonic plates. Just half a century ago, most geologists sternly rejected the idea of drifting continents. But a few intrepid champions of plate tectonics dared to differ. The Mountain Mystery tells their story.

In this appealing biography, children will read about the fascinating life, theories, and discoveries of Alfred Wegener. From his time in Greenland studying meteorology with hot balloons to his theory of Pangea, readers will be eager to learn more about Wegener's contributions to science and the strides he took towards developing the study of plate tectonics. The easy-to-read text, accessible glossary, helpful index, and intriguing facts work in conjunction with the lively images and captivating lab activity to engage readers from beginning to end!

A biography of the man who created the theory of continental drift.

Greene builds on the work of modern scholars but contributes scientific precision and tenacity to debates in areas as diverse as archaeology, early art history, Egyptian fractions, Indo-Iranian religion, classical Greek verse, and Plato's "problem of knowledge."

"Resolution of the sixty year debate over continental drift, culminating in the triumph of plate tectonics, changed the very fabric of Earth Science. This three-volume treatise on the continental drift controversy is the first complete history of the origin, debate and gradual acceptance of this revolutionary theory. Based on extensive interviews, archival papers and original works, Frankel weaves together the lives and work of the scientists involved, producing an accessible narrative for scientists andnon-scientists alike. This first volume covers the period in the early 1900s when Wegener first pointed out that

the Earth's major landmasses could be fitted together like a jigsaw and went on to propose that the continents had once been joined together in a single landmass, which he named Pangaea. It describes the reception of Wegener's theory as it splintered into sub-controversies and geoscientists became divided between the 'fixists' and 'mobilists'"--

In the early 1960s, the emergence of the theory of plate tectonics started a revolution in the earth sciences. Since then, scientists have verified and refined this theory, and now have a much better understanding of how our planet has been shaped by plate-tectonic processes. We now know that, directly or indirectly, plate tectonics influences nearly all geologic processes, past and present. Indeed, the notion that the entire Earth's surface is continually shifting has profoundly changed the way we view our world.

Her maps of the ocean floor have been called "one of the most remarkable achievements in modern cartography", yet no one knows her name. Soundings is the story of the enigmatic, unknown woman behind one of the greatest achievements of the 20th century. Before Marie Tharp, geologist and gifted draftsperson, the whole world, including most of the scientific community, thought the ocean floor was a vast expanse of nothingness. In 1948, at age 28, Marie walked into the newly formed geophysical lab at Columbia University and practically demanded a job. The scientists at the lab were all male; the women who worked there were relegated to secretary or assistant. Through sheer willpower and obstinacy, Marie was given the job of interpreting the soundings (records of sonar pings measuring the ocean's depths) brought back from the ocean-going expeditions of her male colleagues. The marriage of artistry and science behind her analysis of this dry data gave birth to a major work: the first comprehensive map of the ocean floor, which laid the groundwork for proving the then-controversial theory of

continental drift. When combined, Marie's scientific knowledge, her eye for detail and her skill as an artist revealed not a vast empty plane, but an entire world of mountains and volcanoes, ridges and rifts, and a gateway to the past that allowed scientists the means to imagine how the continents and the oceans had been created over time. Just as Marie dedicated more than twenty years of her professional life to what became the Lamont Geological Observatory, engaged in the task of mapping every ocean on Earth, she dedicated her personal life to her great friendship with her co-worker, Bruce Heezen. Partners in work and in many ways, partners in life, Marie and Bruce were devoted to one another as they rose to greater and greater prominence in the scientific community, only to be envied and finally dismissed by their beloved institute. They went on together, refining and perfecting their work and contributing not only to humanity's vision of the ocean floor, but to the way subsequent generations would view the Earth as a whole. With an imagination as intuitive as Marie's, brilliant young writer Hali Felt brings to vivid life the story of the pioneering scientist whose work became the basis for the work of others scientists for generations to come.

Over fifty years ago Henry Morris and John Whitcomb joined together to write a controversial book that sparked dialogue and debate on Darwin and Jesus, science and the Bible, evolution and creation -- culminating in what would later be called the birth of the modern creation science movement. Now, fifty years, forty-nine printings, and 300,000 copies after the initial publication of The Genesis Flood, P&R Publishing has produced a fiftieth anniversary edition of this modern classic. - Back cover.

Explores the life and achievements of the meteorologist whose theory of continental displacement revolutionized the observations about the Earth's development.

An old truism holds that a scientific discovery has three stages: first, people deny it is true; then they deny it is important; finally, they credit the wrong person. Alfred Wegener's "discovery" of continental drift went through each stage with unusual drama. In 1915, when he published his theory that the world's continents had once come together in a single landmass before splitting apart and drifting to their current positions, the world's geologists denied and scorned it. The scientific establishment's rejection of continental drift and plate tectonic theory is a story told often and well. Yet, there is an untold side to Wegener's life: he and his famous father-in-law, Wladimir Köppen (a climatologist whose classification of climates is still in use), became fascinated with climates of the geologic past. In the early 20th century Wegener made four expeditions to the then-uncharted Greenland icecap to gather data about climate variations (Greenland ice-core sampling continues to this day). Ending in Ice is about Wegener's explorations of Greenland, blending the science of ice ages and Wegener's continental drift measurements with the story of Wegener's fatal expedition trying to bring desperately needed food and fuel to workers at the central Greenland ice station of Eismitte in 1930. Arctic exploration books with tragic endings have become all too common, but this book combines Wegener's fatal adventures in Greenland with the relevant science--now more important than ever as global climate change becomes movie-worthy ("The Day After Tomorrow").