

1001 Inventions That Changed The World

Traces centuries of invention and technological innovation in the Muslim world, revealing how Muslim intellectuals built elephant water clocks, drew detailed world maps, and built colossal architectural structures.

Two leaders in the field offer a compelling analysis of the current state of the art and reveal the steps we must take to achieve a truly robust artificial intelligence. Despite the hype surrounding AI, creating an intelligence that rivals or exceeds human levels is far more complicated than we have been led to believe. Professors Gary Marcus and Ernest Davis have spent their careers at the forefront of AI research and have witnessed some of the greatest milestones in the field, but they argue that a computer beating a human in Jeopardy! does not signal that we are on the doorstep of fully autonomous cars or superintelligent machines. The achievements in the field thus far have occurred in closed systems with fixed sets of rules, and these approaches are too narrow to achieve genuine intelligence. The real world, in contrast, is wildly complex and open-ended. How can we bridge this gap? What will the consequences be when we do? Taking inspiration from the human mind, Marcus and Davis explain what we need to advance AI to the next level, and suggest that if we are wise along the way, we won't need to worry about a future of machine overlords. If we focus on endowing machines with common sense and deep understanding, rather than simply focusing on statistical analysis and gathering ever larger collections of data, we will be able to create an AI we can trust--in our homes, our cars, and our doctors' offices. Rebooting AI provides a lucid, clear-eyed assessment of the current science and offers an inspiring vision of how a new generation of AI can make our lives better.

Profiles the life and work of a devout Muslim who developed the first law of motion years before Galileo, and whose experiments using light were later explored by Isaac Newton.

Now available in an updated and revised edition, *Photos that Changed the World* gathers together images of pivotal moments in world history in one stunning volume. In lavish two-page spreads, this book presents nearly one hundred of history's most memorable photographs -- from the Wright Brothers' first flight to the bombing of Pearl Harbor, from Martin Luther King's "I Have a Dream" speech to Nelson Mandela's release from prison, and from the inauguration of President Barack Obama to the Syrian refugee crisis. The volume features pictures from photography masters such as Lewis Hine, Dorothea Lange, Yousuf Karsh, Diane Arbus, and James Nachtwey, as well as iconic images from lesser-known and unknown photojournalists. *Photos that Changed the World* has been updated to include indelible images of the most significant recent events. Engaging essays accompany each photograph and tell the story behind each image.

"Imagine it is the seventh century. As most of Europe continues its descent into a long period of intellectually dormancy, a quiet yet powerful academic revolution is erupting in another corner of the world. Over the next centuries, the geniuses of Muslim society will thrust the boundaries of knowledge forward to such a degree that their innovations still shape civilizations to this day. The staggering achievements of these men and women influenced the development of modern mathematics, science, engineering, and medicine. *1001 Inventions: The Enduring Legacy of Muslim Civilization* sheds new light on this golden era that was once lost to so many, and celebrates the heritage that we all share"--P. [4] of cover.

The history of the world through 1,001 inventions—from prehistoric times to the present day. *1001 Inventions That Changed the World* is an enthralling guide to the world's most important scientific and technological advances. Authoritatively written by a team of historians, scientists, and anthropologists, this book tells the stories behind these innovations, presenting a comprehensive history of the world through invention and discovery. From stone tools and fire at the dawn of humankind to today's self-driving cars, inventions have moved society forward at a remarkable pace. This informative volume shows just how much some of the inventions that we take for granted have transformed the world.

Experience the uplifting power of art on this breathtaking visual tour of 2,500 paintings and sculptures created by more than 700 artists from Michelangelo to Damien Hirst. This beautiful book brings you the very best of world art from cave paintings to Neoexpressionism. Enjoy iconic must-see works, such as Leonardo da Vinci's *Last Supper* and Monet's *Waterlilies* and discover less familiar artists and genres from all parts of the globe. *Art That Changed the World* covers the full sweep of world art, including the Ming era in China, and Japanese, Hindu, and Indigenous Australian art. It analyses recurring themes such as love and religion, explaining key genres from Romanesque to Conceptual art. *Art That Changed the World* explores each artist's key works and vision, showing details of their technique, such as Leonardo's use of light and shade. It tells the story of avant-garde works like Manet's *Le Dejeuner sur l'herbe* (*Lunch on the Grass*), which scandalized society, and traces how one genre informed another - showing how the Impressionists were inspired by Gustave Courbet, for example, and how Van Gogh was influenced by Japanese prints. Lavishly illustrated throughout, look no further for your essential guide to the pantheon of world art.

Black Inventors, Crafting Over 200 Years of Success, highlights the work of Black inventors from over seventy countries. The author, Keith C. Holmes, has spent more than twenty years researching Black inventors from countries that include Australia, Bahamas, Barbados, Canada, Cuba, Ethiopia, France, Germany, Ghana, Dominican Republic, Guadeloupe, Guyana, Haiti, Italy, Jamaica, Japan, Kenya, Mozambique, Nigeria, St. Vincent, South Africa, Tanzania, Trinidad and Tobago, the United Kingdom and the United States. Without inventions, innovations, financial resources, materials, muscle and labor saving devices, civilizations cannot exist and flourish. This book documents a number of inventions, patents and labor saving devices conceived by Black inventors. Among many other inventions, pre-enslaved Africans, developed agricultural tools, building materials, medicinal herbs, cloth and weapons. Although historical documents emphasize that millions of Black people arrived in Canada, the Caribbean, Central and South America and the United States under slavery's yoke, it is relatively unknown that thousands of Africans and their descendants developed numerous labor-saving devices and inventions that spawned companies which generated money and jobs, worldwide. While most authors focus primarily on American and European inventors, Keith Holmes introduces inventions, both past and present, that Black people, developed and patented globally and multiculturally. *Black Inventors, Crafting Over 200 Years of Success*, also features early Black inventors from virtually every state in the US. It includes details about the first Black inventor who obtained a patent in both the Caribbean and the United States. To date, seventeen African American men have been inducted into the National Inventors Hall of Fame. Two inventors, Jan E. Matzelter, (Suriname) and Elijah McCoy, (Colchester, Canada) were not born in this country. The material available in this book, one of the first to address the diversity of black inventors and their inventions from a global perspective, effectively gives the reader, researcher, librarian, student, and teacher the materials they need to understand that the Black inventor is not only a national phenomenon, but also a global giant.

Capturing an engineer's creative vision and mind for detail, this fully illustrated picture book biography sheds light on how the American inventor George Ferris defied gravity and seemingly impossible odds to invent the world's most iconic amusement park attraction, the Ferris wheel. A fun, fact-filled text by Kathryn Gibbs Davis combines with Gilbert Ford's dazzling full-color illustrations to transport readers to the 1893 World's Fair, where George Ferris and his big, wonderful wheel lifted passengers to the skies for the first time.

Do you think you know who first thought of the theory of evolution? Have you ever wondered who created the oldest university in the world? Is Joan of Arc the only rebel girl who led an army that you've heard of? Then you need this stunningly illustrated treasure trove of iconic and hidden amazing Muslim heroes. You'll find people you might know, like Malala Yousafzai, Mo Farah and Muhammad Ali, as well

as some you might not, such as: Hasan Ibn Al-Haytham: the first scientist to prove theories about how light travels, hundreds of years before Isaac Newton. Sultan Razia: a fearsome female ruler. G. Willow Wilson: the comic book artist who created the first ever Muslim Marvel character. Ibtihaj Muhammad: the Olympic and World Champion fencer and the first American to compete in the games wearing a hijab. Noor Inayat Khan: the Indian Princess who became a British spy during WWII. There are so many more amazing Muslim men and women who have changed our world, from pirate queens to athletes, to warriors and mathematicians. Who will your next hero be?

Little Leaders meets Good Night Stories for Rebel Girls in this gorgeous nonfiction picture book that introduces readers to nineteen powerhouse Muslim women who rose up and made their voices heard. Long ago, Muslim women rode into battle to defend their dreams. They opened doors to the world's oldest library. They ruled, started movements, and spread knowledge. Today, Muslim women continue to make history. Once upon a time, they were children with dreams, just like you. Discover the true stories of nineteen unstoppable Muslim women of the twenty-first century who have risen above challenges, doubts, and sometimes outright hostility to blaze trails in a wide range of fields. Whether it was the culinary arts, fashion, sports, government, science, entertainment, education, or activism, these women never took "no" for an answer or allowed themselves to be silenced. Instead, they worked to rise above and not only achieve their dreams, but become influential leaders. Through short, information-rich biographies and vibrant illustrations, Muslim Girls Rise introduces young readers to the diverse and important contributions Muslim women have made, and role models they may never have heard of before, but whose stories they will never forget.

Fully updated for 2021, this is a comprehensive guide to those extraordinary moments that defined human history, written by respected figures from the fields of science, history, and journalism. One of the elite scholars in Baghdad's prestigious House of Wisdom, al-Khwarizmi is best remembered for his famous work *Al-Jabr wa al-Muqabala*, the text that defined the branch of mathematics known as algebra. He was also an accomplished astronomer and geographer. This fascinating biography describes in vivid detail the Islamic world's Golden Age, a period during the Middle Ages when learning and scientific advancement were revered and honored. Readers will learn what is known of al-Khwarizmi's life, as well as the pertinent history of both the Arab world and the fields of science in which al-Khwarizmi excelled.

Presented chronologically and accompanied by more than 900 full-color illustrations, this new addition to the 1001 series presents the important thoughts and big ideas from the most brilliant minds of the past 3,000 years. 25,000 first printing.

Pockets, matches, spectacles, postage stamps. Whether it's the stitches that hold our clothes together or the syringes that deliver life-saving vaccines, small things really do make a big difference. Yet these modest but essential components of everyday life are often overlooked. Science and comedy writer Helen Pilcher shares the unexpected stories of 50 humble innovations - from the accidental soldering of two bits of metal that created the pacemaker, to the eighteenth-century sea captain whose ingenious invention paved the way for the filming of *Star Wars* - and celebrates the joy of the small yet mighty. From the intrepid efforts of Susan B. Anthony to the quiet courage of Rosa Parks, *Little Heroes: Courageous People Who Changed the World* is a young child's first introduction to the brave people who fought to make the world a better place. Simple text and adorable illustrations tell the contributions of eight champions of freedom: Abraham Lincoln, Rosa Parks, Susan B. Anthony, Malala Yousafzai, Harriet Tubman, William Wilberforce, Mahatma Gandhi, and Martin Luther King Jr. A quote from each individual is included on each spread along with colorful, delightful artwork.

Dip into this illustrated account of key inventions and discoveries, listed year by year, with intriguing facts about each invention and the person (or people) who invented it. From the prehistoric hunting tools our early ancestors used to the modern-day smartphones that connect the entire planet, this book provides a fascinating tour through the history of humankind's inventions and discoveries. Fully revised and updated for 2020, *1,000 Inventions and Discoveries* explores recent inventions and discoveries - from the Amazon Echo to the first photograph of a black hole - as well as showcasing revolutionary historical inventions such as the wheel. Whether you're a budding inventor, a history buff, or both, this amazing guide is packed with the inventions and discoveries in science, technology, transport, medicine, and mathematics that changed the course of human existence.

skilled in geometry, ingenious devices (Ibval), music and astronomy. According to Ibn al-Nadim and Ibn Khallikan their weakest subject was astronomy, but this seems to conflict with the opinions of Ibn Yunus and al-Biruni, both good judges, who spoke highly of the accuracy of the Banu Musa's astronomical observations. Muhammad, who was the most influential of the brothers, specialised in geometry and astronomy, and excelled Almad in all the sciences except in the construction of ingenious devices. Al-I: Iasan was a brilliant geometrician with a retentive memory and great powers of deduction. A rival one tried to discredit him in front of al-Ma'mun by saying that al-I: Iasan had read only six of the thirteen books of Euclid's Elements. Al-I: Iasan replied by saying that it was unnecessary for him to read the remainder because he could arrive at the answers to any of Euclid's problems by deduction. Al-Ma'mun acknowledged al-I: Iasan's skill, but did not excuse him, saying: "laziness has prevented you from reading the whole of it - it is to geometry as the letters a, b, t, 111 are to speech and writing." (H. 264). Al-I: Iasan is rarely mentioned by name elsewhere in the sources and may have preferred to devote his time to scholarship, whereas his brothers were involved in a variety of undertakings. At the time of their entry into the House of Wisdom the Banu Musa were poor and needy (H.

Matt Brown has worked as a scientific editor, writer and event host, working for Reed Elsevier and Nature Publishing Group. He served as the Royal Institution's quizmaster for three years, and has also put on science quizzes for the Royal Society, Manchester Science Museum and the Hunterian Museum. As well as making contributions to several popular science books, Matt has also written extensively about London. His previous solo books include the myth-busting *Everything You Know ... Is Wrong* series about London, Science and Art, also published by Batsford.

From the abacus to the zipper, *1001 Inventions That Changed The World* is a fascinating catalog of scientific and technological breakthroughs that have had a formative and lasting impact on the human experience. Have you ever wondered who came up with a staircase that moved, leading eventually to the creation of the escalator? The genius of some inventions is their simplicity: the paperclip, rivets, boomerangs. Many of the items, processes, concepts, medical firsts, and discoveries in this book are life-saving and life-enhancing: can you imagine a world without seat-belts, antibiotics, toothbrushes, traffic signals, or scissors? From the invention of the wheel in the fifth millennium BC to the development of the world wide web and the launch of the MP3 player, this engaging, accessible, and enlightening book reveals the origins and impact of everything from paper to the personal computer, and from penicillin to the contraceptive pill. The worlds of medicine, science, technology, industry, literature, and art have all influenced the way we live, but inventions are essentially human affairs. This book explores the fascinating stories behind the breakthroughs and traces the development of each invention from original concept to completion. *1001 Inventions That Changed The World* is nothing less than an alternative history of the world through invention - a comprehensive study of human endeavour.

A guide to the history of science, introducing the major scientists and their key discoveries. It's an inspiring, accessible and informative introduction, a tour of the world of science that dwells at each stop on the journey. *The Story of Science* is like the televised highlights of an important soccer match. Watch the highlights, and you get a sense of the whole match in just a few minutes. A perfect introduction to science for young minds.

Discover the inventions that have made our world what it is today. A great invention opens the door to a new era in human history. The stone axe, for example, invented some 2 million years ago in East

Africa, enabled us to enter the human path of endless improvements through inventions. The taming of fire enabled us to cook food as well as leave the warmth of Africa and move to the frigid lands of the North. From the stone axe to the computer and the Internet, this book provides a fascinating tour of the most important inventions and inventors throughout history. You'll discover the landmark achievements and the men and women that made the world what it is today. Great Inventions That Changed the World is written by Professor James Wei, a renowned educator and engineer who holds several patents for his own inventions. Following an introductory chapter examining the role of inventors and inventions in fueling innovation and global advancement, the book is organized to show how inventions are spurred by human needs and desires, including: Work Food, clothing, and housing Health and reproduction Security As you progress through the book, you'll not only learn about inventions and inventors, but also the impact they have had on our lives and the society and environment in which we live today. Inventions solve problems, but as this book so expertly demonstrates, they can also directly or indirectly create new problems as well, from pollution to global warming to bioterrorism. By enabling us to understand the impact of inventions throughout history, this book can help guide the next generation of citizens, decision makers, and inventors.

From language to culture to cultural collision: the story of how humans invented history, from the Stone Age to the Virtual Age Traveling across millennia, weaving the experiences and world views of cultures both extinct and extant, The Invention of Yesterday shows that the engine of history is not so much heroic (battles won), geographic (farmers thrive), or anthropogenic (humans change the planet) as it is narrative. Many thousands of years ago, when we existed only as countless small autonomous bands of hunter-gatherers widely distributed through the wilderness, we began inventing stories--to organize for survival, to find purpose and meaning, to explain the unfathomable. Ultimately these became the basis for empires, civilizations, and cultures. And when various narratives began to collide and overlap, the encounters produced everything from confusion, chaos, and war to cultural efflorescence, religious awakenings, and intellectual breakthroughs. Through vivid stories studded with insights, Tamim Ansary illuminates the world-historical consequences of the unique human capacity to invent and communicate abstract ideas. In doing so, he also explains our ever-more-intertwined present: the narratives now shaping us, the reasons we still battle one another, and the future we may yet create.

For centuries following the fall of Rome, western Europe was a benighted backwater, a world of subsistence farming, minimal literacy, and violent conflict. Meanwhile Arab culture was thriving, dazzling those Europeans fortunate enough to catch even a glimpse of the scientific advances coming from Baghdad, Antioch, or the cities of Persia, Central Asia, and Muslim Spain. There, philosophers, mathematicians, and astronomers were steadily advancing the frontiers of knowledge and revitalizing the works of Plato and Aristotle. In the royal library of Baghdad, known as the House of Wisdom, an army of scholars worked at the behest of the Abbasid caliphs. At a time when the best book collections in Europe held several dozen volumes, the House of Wisdom boasted as many as four hundred thousand. Even while their countrymen waged bloody Crusades against Muslims, a handful of intrepid Christian scholars, thirsty for knowledge, traveled to Arab lands and returned with priceless jewels of science, medicine, and philosophy that laid the foundation for the Renaissance. In this brilliant, evocative book, Lyons shows just how much "Western" culture owes to the glories of medieval Arab civilization, and reveals the untold story of how Europe drank from the well of Muslim learning.

Every once in a while, an idea comes along that makes the entire world sit up and take notice. From the earliest understandings of our place in the solar system, via Darwinism, DNA, neutrons and quarks, right up to the theories that are pushing the boundaries of our knowledge today, we are forever propelled forward by our most gifted scientific minds. In this fascinating book, former BBC Focus magazine editor Jheni Osman explores 100 of the most forward thinking, far-reaching and downright inspired ideas and inventions in history, each nominated by experts from all fields of science and engineering. With selections from established authorities such as Brian Cox, Patrick Moore, Richard Dawkins and Marcus du Sautoy, Osman covers topics as diverse as the Big Bang, vaccination, computing, radioactivity, human genomes, the wheel and many more. Each essay looks at the logic behind these great inventions, discoveries, theories and experiments, studying the circumstances that brought them into being and assessing the impact that they had on the world at large. An intriguing and thought-provoking collection, 100 Ideas that Changed the World offers us a glimpse into the minds behind history's greatest eureka moments.

1001 Inventions That Changed the World1001 Inventions that Changed the WorldBarrons Educational Series Incorporated

A Publishers Weekly best book of 1995! Dr. Michael Guillen, known to millions as the science editor of ABC's Good Morning America, tells the fascinating stories behind five mathematical equations. As a regular contributor to daytime's most popular morning news show and an instructor at Harvard University, Dr. Michael Guillen has earned the respect of millions as a clear and entertaining guide to the exhilarating world of science and mathematics. Now Dr. Guillen unravels the equations that have led to the inventions and events that characterize the modern world, one of which -- Albert Einstein's famous energy equation, $E=mc^2$ -- enabled the creation of the nuclear bomb. Also revealed are the mathematical foundations for the moon landing, airplane travel, the electric generator -- and even life itself. Praised by Publishers Weekly as "a wholly accessible, beautifully written exploration of the potent mathematical imagination," and named a Best Nonfiction Book of 1995, the stories behind The Five Equations That Changed the World, as told by Dr. Guillen, are not only chronicles of science, but also gripping dramas of jealousy, fame, war, and discovery.

Examines the cities of the ancient Arab world that became flourishing Muslim metropolises which were key locations for the development of algebra, the decimal system, astronomy, medicine, and other sciences from the eighth to the fifteenth centuries.

A captivating, humorous, and downright perplexing selection of nineteenth-century inventions as revealed through remarkable--and hitherto unseen--illustrations from the British National Archive Inventions that Didn't Change the World is a fascinating visual tour through some of the most bizarre inventions registered with the British authorities in the nineteenth century. In an era when Britain was the workshop of the world, design protection (nowadays patenting) was all the rage, and the apparently lenient approval process meant that all manner of bizarre curiosities were painstakingly recorded, in beautiful color illustrations and well-penned explanatory text, alongside the genuinely great inventions of the period. Irreverent commentary contextualizes each submission as well as taking a humorous view on how each has stood the test of time. This book introduces such gems as a ventilating top hat; an artificial leech; a design for an aerial machine adapted for the arctic regions; an anti-explosive alarm whistle; a tennis racket with ball-picker; and a currant-cleaning machine. Here is everything the end user could possibly require for a problem he never knew he had. Organized by area of application--industry, clothing, transportation, medical, health and safety, the home, and leisure--Inventions that Didn't Change the World reveals the concerns of a bygone era giddy with the possibilities of a newly industrialized world.

The Middle Ages were a period of tremendous cultural and scientific advancement in the Islamic Empire--ideas and inventions that shaped our world. Did you know that: • The

numbers you use every day (Arabic numerals!) are a Muslim invention? • The marching band you hear at football games has its roots in the Middle East? • You are drinking orange juice at breakfast today thanks to Islamic farming innovations? • The modern city's skyline was made possible by Islamic architecture? The Muslim world has often been a bridge between East and West, but many of Islam's crucial innovations are hidden within the folds of history. In this important book, Bryn Barnard uses short, engaging text and gorgeous full-color artwork to bring Islam's contributions gloriously to life. Chockful of information and pictures, and eminently browsable, *The Genius of Islam* is the definitive guide to a fascinating topic.

This DK children's book aged 11-14 is brimming with exciting, educational activities and projects that focus on electronics and technology. Keep your siblings out of your room with a brilliant bedroom alarm, power a propellor motorboat, make a stereo from pipes, build your own AM radio, and construct a night light by following step-by-step instructions and using affordable equipment. *Inventor Lab* will engage budding scientists and engineers as they experiment, invent, trial, and test technology, electronics, and mechanics at home. Simple steps with clear photographs take readers through the stages of each low-cost project, with fact-filled "How it works" panels to explain the science behind each one, and to fascinate them with real-world examples. With an increasing focus across school curricula on encouraging children to enjoy and explore STEM subjects (science, technology, engineering, and maths), *Inventor Lab* is the perfect companion for any inquisitive child with an interest in how the worlds of science experiments and technology work, and why.

Presents a review of technological innovations and inventions, from the ancient world to the present day.

Ultimate guide to the discoveries that changed the world From the discovery of the wheel to the worldwide web our thirst for innovation is what makes us human. *Science Year by Year* takes a fascinating look at our heritage of invention and explores how science has shaped the past and how it may shape the future. *Science Year by Year* has a new discovery for everyone in the family, with global coverage of all major scientific advances. Groundbreaking thinkers such as Marie Curie, Albert Einstein and Charles Darwin are covered, with their discoveries clearly explained and situated in scientific history with illustrated timelines. Revolutionary innovations such as measuring time, gears and plastics are detailed alongside scientific artefacts such as navigation tools and flying machines. *Science Year by Year* is perfect for anyone interested in invention and innovation with exciting discoveries to be made by all.

From safety pins to steam engines to cell phones, the stories behind innovations that have transformed everyday lives. We take thousands of inventions for granted, using them daily and enjoying their benefits. But how much do we really know about their origins and development? This absorbing new book tells the stories behind the inventions that have changed the world, with details about: Convenience items, such as safety pins, toothbrushes, and bifocals Weapons of war, including explosives, gunpowder, and shrapnel shells Industrial advances, such as the steam engine and the power loom for weaving Transportation advances, including the airplane, the diesel engine, the automobile, and the air-inflated rubber tire Electronic marvels, including color television, the microprocessor, the personal computer, the compact disc, and the cell phone Medical advances, from antiseptic surgery to the electron microscope...and much more You'll also learn more about many inventors and pioneers of science and technology—including Eli Whitney, James Watt, Benjamin Franklin, Henry Bessemer, Thomas Edison, J.B. Dunlop, the Wright Brothers, Werner von Braun, Jonas Salk, J. Robert Oppenheimer, and others.

The life story of Ibn Sina (980-1037), one of the greatest philosophers, scientists and physicians of the Islamic world. Born in Persia more than a thousand years ago, Ibn Sina was one of the greatest thinkers of his time — a philosopher, scientist and physician who made significant discoveries, especially in the field of medicine, and wrote more than one hundred books. As a child, Ibn Sina was extremely bright, a voracious reader who loved to learn and was fortunate to have the best teachers. He memorized the Qur'an by the age of ten and completed his medical studies at sixteen. He spent his life traveling, treating the sick, seeking knowledge through research, and writing about his discoveries. He came up with new theories in the fields of physics, chemistry, astronomy and education. His most famous work is *The Canon of Medicine*, a collection of books that were used for teaching in universities across the Islamic world and Europe for centuries. Ibn Sina's story, told in the first person and beautifully illustrated, provides a fascinating glimpse into the life of one of the great intellects of the past. Correlates to the Common Core State Standards in English Language Arts: CCSS.ELA-LITERACY.RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. CCSS.ELA-LITERACY.RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. CCSS.ELA-LITERACY.RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

[Copyright: 177ec56d1113268e498b99b65b80f1b1](https://www.ck12.org/177ec56d1113268e498b99b65b80f1b1/)