Blockhead The Life Of Fibonacci

Appreciating the beauty of nature around us is even more spectacular when we can recognize a certain pattern to it. Fibonacci spirals can be observed throughout the natural world, from a small snail shell to a cresting ocean wave. The golden ratio can be seen in the proportion of animal bodies and faces. It is nature's mysterious code.Illustrated by Marija Mladenovic, this coloring book brings 20 hand-drawn designs featuring roses, sunflowers, butterflies, seashells, peacocks, pineapples and more. Printed on one-sided paper, it is suitable for coloring with colored pencils, watercolor, gel pens, crayons, or markers.Find the beauty of the Fibonacci Sequence in nature while relaxing and reveal the artist within you!

"The mystery of the pyramids is solved before our eyes" in this illustrated YA guide to their construction by the Caldecott Medal-winning author (Kirkus). In Pyramid, acclaimed author and illustrator David Macaulay explores the construction of ancient Egyptian pyramids from the initial planning stages to the methods used to lift stones up to the structure's highest level. Through concise text and richly detailed black and white illustrations your readers are introduced not only to ancient Egyptian engineering, tools, and labor practices, but also the philosophy of life, death, and afterlife that made these awe-inspiring monuments necessary as a pharaoh's final resting place. "Macaulay's brilliant Pyramid shows, detail by detail, how the great pharaohs' burial places were conceived and constructed… His draftsmanship is unexcelled, and his book is pharaonic in opulence and design."—Time

The biggest mathematical mystery in nature—Fibonacci numbers! Named after a famous mathematician, the number pattern is simple: 1, 1, 2, 3, 5, 8, 13. . . . Each number in the sequence comes from adding the two numbers before it. What's the mystery? The pattern crops up in the most unexpected places. You'll find it in the disk of a sunflower, the skin of a pineapple, and the spiral of a nautilus shell. No one knows how nature came up with the sequence. Sarah C. and Richard P. Campbell introduce the Fibonacci sequence through a series of stunning photographs in this ALA Notable Children's Book. Young readers will soon be seeing nature through new eyes, looking for Fibonacci numbers in daisies, pinecones, leaf patterns, seashells, and more.

The true story of eighteenth-century mathematician Sophie Germain, who solved the unsolvable to achieve her dream. When her parents took away her candles to keep their young daughter from studying math...nothing stopped Sophie. When a professor discovered that the homework sent to him under a male pen name came from a woman...nothing stopped Sophie. And when she tackled a math problem that male scholars said would be impossible to solve...still, nothing stopped Sophie. For six years Sophie Germain used her love of math and her undeniable determination to test equations that would predict patterns of vibrations. She eventually became the first woman to win a grand prize from France's prestigious Academy of Sciences for her formula, which laid the groundwork for much of modern architecture (and can be seen in the book's illustrations). Award-winning author Cheryl Bardoe's inspiring and poetic text is brought to life by acclaimed artist Barbara McClintock's intricate pen-and-ink, watercolor, and collage illustrations in this true story about a woman who let nothing stop her.

Looks at the history of mathematical discoveries and the lives of great mathematicians.

An inspiring famous women book for girls, Girls Who Looked Under Rocks also makes the perfect feminist gift for girls. Girls Who Looked Under Rocks: The Lives of Six Pioneering Naturalists is for a world no longer confined by gender stereotypes, and a place where science is for girls, too! Parents and children will love this portrayal of six women who grew up playing in the dirt and went on to become award winning scientists and writers. All of these women were discouraged from pursuing careers in science, but they all persisted in their passion. If there is a pre-teen or adolescent in your life, especially a girl, take a look at this empowering, inspiring chapter book. It portrays the youths and careers of six remarkable women whose

curiosity about nature fueled a passion to steadfastly overcome obstacles to careers in traditionally men-only occupations. The six-Maria Merian (b.1647), Anna Comstock (b.1854), Frances Hamerstrom (b.1907), Rachel Carson (b.1907), Miriam Rothschild (b.1908), and Jane Goodall (b.1934)—all became renowned scientists, artists and writers. A wonderful resource for young researchers and biographers, these stories can be a starting point for issues of gender, science, and the environment.

First published in 1202, Fibonacci's Liber Abaci was one of the most important books on mathematics in the Middle Ages, introducing Arabic numerals and methods throughout Europe. This is the first translation into a modern European language, of interest not only to historians of science but also to all mathematicians and mathematics teachers interested in the origins of their methods.

Teedie was not exactly the stuff of greatness: he was small for his size. Delicate. Nervous. Timid. By the time he was ten years old, he had a frail body and weak eyes. He was deviled by asthma, tormented by bullies. His favorite place to be was at home. Some might think that because of these things, Teedie was destined for a ho-hum life. But they would be wrong. For teeedie had a strong mind, as well as endless curiosity and determination. Is that all? No. Teedie also had ideas of his own--lots of them. It wasn't long before the world knew him as Theodore Roosevelt, the youngest president of the United States.

A biography of Leonardo Fibonacci, the 12th century mathematician who discovered the numerical sequence named for him.

A mathematician's ten-year quest to tell Fibonacci's story In 2000, Keith Devlin set out to research the life and legacy of the medieval mathematician Leonardo of Pisa, popularly known as Fibonacci, whose book Liber abbaci, or the "Book of Calculation," introduced modern arithmetic to the Western world. Although most famous for the Fibonacci numbers—which, it so happens, he didn't discover—Fibonacci's greatest contribution was as an expositor of mathematical ideas at a level ordinary people could understand. Yet Fibonacci was forgotten after his death, and it was not until the 1960s that his true achievements were finally recognized. Drawing on the diary he kept of his quest, Devlin describes the false starts and disappointments, the unexpected turns, and the occasional lucky breaks he encountered in his search. Fibonacci helped to revive the West as the cradle of science, technology, and commerce, yet he vanished from the pages of history. This is Devlin's search to find him.

In Fibonacci's Field, Lonely and Chalk Rabbit meet, snuggle together and then spend a year trying to cope with their ever-increasing brood and the seasonal changes that bring a new challenge each month. Presented in calendar format with one pop-up illustration and other special features.

Suzy spends her year in first grade waiting for her father, who is serving in Vietnam, and when the postcards stop coming she worries that he will never make it home.

While watching a game in progress, the reader is introduced to the game of baseball, covering its equipment, players, and basic plays.

Julie Ellis and Phyllis Hornung Peacock team up once again to explore Pythagorean ratios in this humorous sequel to WHAT'S YOUR ANGLE, PYTHAGORAS? Pythagoras and his cousins want to win a music contest, but first they must figure out how to play their instruments in tune, something that's never been done before. While trying to fix the problem, Pythagoras makes an important discovery--notes that sound pleasant together have a certain mathematical relationship. When Pythagoras applies this ratio to his cousins' pipes and lyres, the result is music to the ears.

Best known for his general theory of relativity and the famous equation linking mass and energy, $E = mc$, Albert Einstein had a lasting impact on the world of science, the extent of which is illuminated--along with his fascinating life and unique personality--in this lively history. In addition to learning all about Einstein's important contributions to science, from proving the

existence and size of atoms and launching the field of quantum mechanics to creating models of the universe that led to the discovery of black holes and the big bang theory, young physicists will participate in activities and thought experiments to bring his theories and ideas to life. Such activities include using dominoes to model a nuclear chain reaction, replicating the expanding universe in a microwave oven, creating blue skies and red sunsets in a soda bottle, and calculating the speed of light using a melted chocolate bar. Suggestions for further study, a time line, and sidebars on the work of other physicists of the day make this an incredibly accessible resource for inquisitive children.

When I looked up, I shivered. How many stars were in the sky? A million? A billion? Maybe the number was as big as infinity. I started to feel very, very small. How could I even think about something as big as infinity? Uma can't help feeling small when she peers up at the night sky. She begins to wonder about infinity. Is infinity a number that grows forever? Is it an endless racetrack? Could infinity be in an ice cream cone? Uma soon finds that the ways to think about this big idea may just be . . . infinite.

A pocket-sized gift book packed with patriotic facts for ordinary Americans and history buffs alike. This handbook is the perfect patriotic present for any engaged United States citizen. Who played the first game of baseball? What's a bicameral congress? Where did Mount Rushmore come from? Who is Geronimo and why do we yell his name when we jump? Plus: • All about the Declaration of Independence • Ten Books Every American Should Read • Assassination Attempts on U.S. Presidents • The History of the Statue of Liberty • How to Bake the Perfect Apple Pie

When Matt and Bibi are locked inside an Egyptian pyramid with only each other, their dog Riley, and geometric hieroglyphics, the twins must use their math knowledge to solve the riddles on the walls and locate the burial chamber.

A colorfully illustrated biography of the Greek philosopher and scientist Eratosthenes, who compiled the first geography book and accurately measured the globe's circumference.

Meet Manya Sklodowska, better known today as Marie Curie, the co-discoverer of radium, and who became the first woman awarded the Nobel prize for her work on the discovery. Learn what life was like for Marie, and the effect her discovery had on the world.

Hamilton's classic coming-of-age tale: The National Book Award– and Newbery Award–winning novel about a young man who must choose between supporting his tight-knit family and pursuing his own dreams Mayo Cornelius Higgins perches on top of a homemade forty-foot tower, considering two destinies. Behind him is his family's beloved house at the foot of a mountain that strip mining has reduced to loose rubble. In front of him, the beautiful Ohio River Valley and the great world beyond. As M.C. weighs whether to stay with the family and home he loves or set off into the world on his own, there appear on the horizon two strangers who will make his decision all the more difficult.

An entertaining and essential collection of stories about the surprising and strange fates of the fifty-six Founding Fathers who signed the Declaration of Independence. Now in paperback with a brand-new cover, the wildly successful Signing Their Lives Away tells the untold stories of the signers of the Declaration of Independence. In the summer of 1776, a group of 56 men risked their lives and livelihood to defy King George III and sign the Declaration of Independence—yet how many of them do we remember? Signing Their Lives Away introduces readers to the eclectic group of statesmen, soldiers, slaveholders, and scoundrels who signed this historic document—and the many strange fates that awaited them. To wit: • The Signer Who Was Poisoned By His Nephew • The Signer Who Was Killed In a Duel • The Signer Who Went to Prison • The Signer Who Was Lost at Sea • The Signer Who Achieved Fame as a Brewer Complete with portraits of every signatory, Signing Their Lives Away provides an entertaining and enlightening narrative for students, history buffs, politicos, and Hamilton fans alike.

Ant is honored to receive an invitation to lion's annual dinner party, but is shocked when the other guests behave rudely and then accuse her of thinking only of herself.

The most ubiquitous, and perhaps the most intriguing, number pattern in mathematics is the Fibonacci sequence. In this simple pattern beginning with two ones, each succeeding number is the sum of the two numbers immediately preceding it (1, 1, 2, 3, 5, 8, 13, 21, ad infinitum). Far from being just a curiosity, this sequence recurs in structures found throughout nature-from the arrangement of whorls on a pinecone to the branches of certain plant stems. All of which is astounding evidence for the deep mathematical basis of the natural world.With admirable clarity, math educators Alfred Posamentier and Ingmar Lehmann take us on a fascinating tour of the many ramifications of the Fibonacci numbers. The authors begin with a brief history of their distinguished Italian discoverer, who, among other accomplishments, was responsible for popularizing the use of Arabic numerals in the West. Turning to botany, the authors demonstrate, through illustrative diagrams, the unbelievable connections between Fibonacci numbers and natural forms (pineapples, sunflowers, and daisies are just a few examples). In art, architecture, the stock market, and other areas of society and culture, they point out numerous examples of the Fibonacci sequence as well as its derivative, the golden ratio. And of course in mathematics, as the authors amply demonstrate, there are almost boundless applications in probability, number theory, geometry, algebra, and Pascal's triangle, to name a few.Accessible and appealing to even the most math-phobic individual, this fun and enlightening book allows the reader to appreciate the elegance of mathematics and its amazing applications in both natural and cultural settings.Alfred S. Posamentier (New York, NY) is dean of the School of Education and professor of mathematics education at The City College of the City University of New York. He has published over 40 books in the area of mathematics and mathematics education, including Pi: A Biography of the World's Most Mysterious Number and Math Charmers: Tantalizing Tidbits for the Mind.Ingmar Lehmann (Berlin, Germany) is on the mathematics faculty at Humboldt University in Berlin and the coauthor of Pi: A Biography of the World's Most Mysterious Number.

Most people think of mathematicians as solitary, working away in isolation. And, it's true, many of them do. But Paul Erdos never followed the usual path. At the age of four, he could ask you when you were born and then calculate the number of seconds you had been alive in his head. But he didn't learn to butter his own bread until he turned twenty. Instead, he traveled around the world, from one mathematician to the next, collaborating on an astonishing number of publications. With a simple, lyrical text and richly layered illustrations, this is a beautiful introduction to the world of math and a fascinating look at the unique character traits that made "Uncle Paul" a great man. The Boy Who Loved Math by Deborah Heiligman is a Kirkus Reviews Best Book of 2013 and a New York Times Book Review Notable Children's Book of 2013.

A visually striking conceptual picture book introduces young children to naturally repeating fractals while explaining what makes them unique, explaining how to move beyond familiar shapes in nature to recognize more intricate patterns.

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The international best-seller that makes mathematics a thrilling exploration. In twelve dreams, Robert, a boy who hates math, meets a Number Devil, who leads him to discover the amazing world of numbers: infinite numbers, prime numbers, Fibonacci numbers, numbers that magically appear in triangles, and numbers that expand without . As we dream with him, we are taken further and further into mathematical theory, where ideas eventually take flight, until everyone-from those who fumble over fractions to those who solve complex equations in their heads-winds up marveling at what numbers can do. Hans Magnus Enzensberger is a true polymath, the kind of superb intellectual who loves thinking and marshals all of his charm and wit to share his passions with the world. In The Number Devil, he brings together the surreal

logic of Alice in Wonderland and the existential geometry of Flatland with the kind of math everyone would love, if only they had a number devil to teach it to them.

Branching, spiraling, spinning--patterns can be found almost anywhere in nature. This book is a starting point that introduces kids to some major patterns in the natural world. Full color.x 10.

For fans of the Sir Cumference series with coordinate geometry on their mind, here is the seventh installment in this fun look at math and language. While riding through the forests of Angleland, cousins Per and Radius realize they are lost and are desperate for a map to guide them home. Soon they come across a mysterious house in the hills. Inside they find a map to a treasure belonging to Xaxon Yellowbearyd, the fiercest Viking warrior of his time. Per and Radius must decode the strange numbered grid on the map, while trying to steer clear of the pack of bungling bandits who are on their tail. Will they find the treasure in time? Cindy Neuschwander delivers yet another intriguing math adventure featuring the well-known characters of Angleland. Readers will enjoy following Per and Radius in their quest while learning how coordinate geometry relates to everyday life. Wayne Geehan's beautiful illustrations offer a bit of comic relief, while also clearly demonstrating the concepts explored in the story.

Each week the residents of Chee take a portion of their bountiful crops to the wizard who lives on the hill. One week the Pied Piper decides that the wizard doesn't deserve his full portion. The next day two rabbits appear in a field. The day after that, there are two more rabbits. Each day the number of rabbits increases and they are eating everything in their path. It is up to a young girl named Amanda to save Chee's crops by figuring out the pattern by which the rabbits multiply.

Shares strategies for accumulating real-world wealth while staying independently employed, distilling lessons from a variety of sources effectively used by the authors during the recent financial crisis.

A boy rides a bicycle down a dusty road. But in his mind, he envisions himself traveling at a speed beyond imagining, on a beam of light. This brilliant mind will one day offer up some of the most revolutionary ideas ever conceived. From a boy endlessly fascinated by the wonders around him, Albert Einstein ultimately grows into a man of genius recognized the world over for profoundly illuminating our understanding of the universe. Jennifer Berne and Vladimir Radunsky invite the reader to travel along with Einstein on a journey full of curiosity, laughter, and scientific discovery. Parents and children alike will appreciate this moving story of the powerful difference imagination can make in any life.

The story of the medieval genius whose 1202 book changed the course of mathematics in the West and helped bring on the modern era.

History meets archaeology in this fantastic new series. You can uncover the secrets behind the worlds lost towns, tombs, shipwrecks and treasures. You can find out how archaeologists discovered these priceless finds. There are paired lost and found spreads for each discovery. It features stunning photography, and fascinating historical accounts.

Designed for ages grades K-5 and to be done at home or with small groups, this interactive multi-activity mini-course introduces children to the Fibonacci sequence and how math and art can intersect with science and nature. It takes one of the most fascinating mathematical topics, the Fibonacci sequence, and the related Golden Ratio, and shows children how math can be used to see

patterns in all kinds of natural settings, such as leaf arrangement, snail shells, and hurricanes. The mini-course includes a richly illustrated story-based lesson, as well as games, activities, and projects that appeal to all types of learners. An illustrated story about Fibonacci and his imaginary bean stalk introduces children to the mathematical concepts of sequences and sets, as well as an illustration of Fibonacci's famous pattern. By creating their own Fibonacci Flower Books, children then begin to investigate some of the places the famous sequence is found in nature. Children are then encouraged to visualize the relationship between numbers and shapes as they learn how to create their own Golden Spirals from the Fibonacci sequence. What elements of nature can they see in their spirals? Next, in the Purely Numbers Game, children reinforce and expand their understanding of these mathematical concepts by making their own mathematical sets. Finally, children will have fun testing how well they know the Fibonacci sequence by playing the movement-based Walk for Fibonacci. Most materials needed to complete the mini-course can be cut from the book. The mini-course requires only a few additional common household items to complete the activities: Colored pencils, eraser, pencil, scissors, mathematical compass (optional), two dice, blank paper, tape or glue. Upon completing the mini-course, children will be provided with links to additional online resources and will earn new concept badges for their Science Tool Kit (included in the mini-course)- - including Sequence, Pattern, Phyllotaxis, Opposite Phyllotaxis, and Sum.

Ada Lovelace (1815–1852) was the daughter of Lord Byron, a poet, and Anna Isabella Milbanke, a mathematician. Her parents separated when she was young, and her mother insisted on a logic-focused education, rejecting Byron's "mad" love of poetry. But Ada remained fascinated with her father and considered mathematics "poetical science." Via her friendship with inventor Charles Babbage, she became involved in "programming" his Analytical Engine, a precursor to the computer, thus becoming the world's first computer programmer. This picture book biography of Ada Lovelace is a compelling portrait of a woman who saw the potential for numbers to make art.

An award-winning author and illustrator join forces in an emotional retelling of Henry "Box" Brown's famed escape from slavery that is celebrated for its daring and originality.

Presents the lives, deaths, and scandals involving the thirty-nine signers of the United States Constitution, including Benjamin Franklin, Alexander Hamilton, and James McHenry.

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