

## Gregor Mendel The Friar Who Grew Peas

Dung is a precious pile of food and drink for these beetles. Simple science text and dramatic illustrations give a close-up view of the fascinating world of the dung beetle. When an animal lightens its load, dung beetles race to the scene. They battle over, devour, hoard, and lay their eggs in the precious poop. Dung is food, drink, and fuel for new lifelias crucial to these beetles as the beetles are to many habitats, including our own. Back matter includes instructions for finding dung beetles, fun facts, glossary, and a selected bibliography. 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.

Gregor Mendel was determined to work out how traits are inherited. He spent seven years in his monastery garden experimenting on over 300,000 strains of plants. While Darwin's work provoked agitated debate, Mendel's work was completely ignored. A fellow scientist told him that his work was incomplete and unconvincing. Was he furious that a younger man had struck on something far more original than he could ever produce? After Mendel's death all his papers were burnt. Was this the result of a fit of jealousy by a monk who succeeded him as abbot? Finally, in 1900, Mendel's paper was found, and it became apparent that he was onto something extremely significant. Had Darwin known about his work many of the debates about the details of natural selection might have been resolved.

As the need for sustainable development practices around the world continues to grow, it has become imperative for citizens to become actively engaged in the global transition. By evaluating data collected from various global programs, researchers are able to identify strategies and challenges in implementing civic engagement initiatives. Analyzing the Role of Citizen Science in Modern Research focuses on analyzing data on current initiatives and best practices in citizen engagement and education programs across various disciplines. Highlighting emergent research and application techniques within citizen science initiatives, this publication appeals to academicians, researchers, policy makers, government officials, technology developers, advanced-level students and program developers interested in launching or improving citizen science programs across the globe.

Physical Science for Kids
The Story of Gregor Mendel and the Discovery of Genetics
An Introduction to Micropropagation
Mendelism
Stories of African Americans and the American Revolution

#### What the World Eats

Abs spends his youth helping on his father's farm, participating in country sports and reading until, at nineteen, he leaves home to seek his fortune

This fascinating picture book biography from beloved author of the Lemonade War series Jacqueline Davies and Caldecott honor-winning illustrator Melissa Sweet chronicles the life of scientist John James Audubon, who pioneered a technique essential to our understanding of birds thanks to his lifelong love for the species. If there was one thing James loved to do more than anything else, it was to be in the great outdoors watching his beloved feathered friends. In the fall of 1804, he was determined to find out if the birds nesting near his Pennsylvania home would really return the following spring. Through careful observation, James laid the foundation for all that we know about migration patterns today. Capturing the early passion of this bird-obsessed young man as well as the meticulous study and scientific methods behind his research, this lively, gorgeously illustrated biography will leave young readers listening intently for the call of birds large and small near their own home.

A Guided Study (Masterworks of Discovery)

Follows the adventures of Minn, a three-legged snapping turtle, as she slowly makes her way from her birthplace at the headwaters of the Mississippi River to the mouth of river on the Gulf of Mexico.

Finding God in the Waves

And the Roots of Genetics

From Predator to Protector

The Laws of Genetics and Gregor Mendel

Weed Is a Flower

What's the Matter in Mr. Whiskers' Room?

The Story of Sir Isaac Newton

Examines the life and work of the nineteenth-century Austrian monk who discovered the laws of genetics.

**Matter: Physical Science for Kids** from the **Picture Book Science** series gets kids excited about science! What's the matter? Everything is matter! Everything you can touch and hold is made up of matter—including you, your dog, and this book! Matter is stuff that you can weigh and that takes up space, which means pretty much everything in the world is made of matter. In **Matter: Physical Science for Kids**, kids ages 5 to 8 explore the definition of matter and the different states of matter, plus the stuff in our world that isn't matter, such as sound and light! In this nonfiction picture book, children are introduced to physical science through detailed illustrations paired with a compelling narrative that uses fun language to convey familiar examples of real-world science connections. By recognizing the basic physics concept of matter and identifying the different ways matter appears in real life, kids develop a fundamental understanding of physical science and are impressed with the idea that science is a constant part of our lives and not limited to classrooms and laboratories. Simple vocabulary, detailed illustrations, easy science experiments, and a glossary all support exciting learning for kids ages 5 to 8. Perfect for beginner readers or as a read aloud nonfiction picture book! Part of a set of four books in a series called Picture Book Science that tackles different kinds of physical science (waves, forces, energy, and matter), **Matter** offers beautiful pictures and simple observations and explanations. Quick STEM activities such as weighing two balloons to test if air is matter help readers cross the bridge from conceptual to experiential learning and provide a foundation of knowledge that will prove invaluable as kids progress in their science education. Perfect for children who love to ask, "Why?" about the world around them, **Matter** satisfies curiosity while encouraging continual student-led learning.

Presents the life of the geneticist, discussing the poverty of his childhood, his struggle to get an education, his life as a monk, his discovery of the laws of genetics, and the rediscovery of his work thirty-five years after its publication.

How well do you know our favorite furry companion? Did they really descend from wolves? What's the difference between a Chihuahua and a Saint Bernard? And just how smart are they? Join one friendly mutt on a journey to discover the secret origin of dogs, how genetics and evolution shape species, and where in the world his favorite ball bounced off to.

Plants from Test Tubes

Abigail Adams

Welcome to the Future

Gregor Mendel: Planting the Seeds of Genetics

Gregor Mendel

A Guided Study

Matter

**Like his great-great-great-uncle, geneticist Gregor Mendel, Dr. Benedict Lambert struggles to unlock the secrets of heredity and genetic determinism. However, Benedict's mission is particularly urgent and particularly personal, for he was born with achondroplasia--he's a dwarf. He's also a man desperate for love and acceptance, and when he finds both in Jean, a shy librarian, he stumbles upon an opportunity to correct the injustice of his own, at least to him, unlucky genes. Entertaining and tender, this witty and surprisingly erotic novel reveals the beauty and drama of scientific inquiry as it informs us of the simple passions against which even the most brilliant mind is rendered powerless.**

A lyrical picture book biography of Simone Biles, gymnastics champion and Olympic superstar. Before she was a record-breaking gymnast competing on the world stage, Simone Biles spent time in foster care as a young child. Nimble and boundlessly energetic, she cherished every playground and each new backyard. When she was six years old, Simone's family took shape in a different way. Her grandparents Ron and Nellie Biles adopted Simone and her sister Adria. Ron and Nellie became their parents. Simone was also introduced to gymnastics that same year, launching a lifelong passion fueled by remarkable talent, sacrifice, and the undying support of her family. From her athletic early childhood to the height of her success as an Olympic champion, *Flying High* is the story of the world's greatest gymnast from author Michelle Meadows and illustrator Ebony Glenn.

A story about having faith, losing it, and finding it again through science—revealing how the latest in neuroscience, physics, and biology help us understand God, faith, and ourselves. Mike McHargue, host of The Liturgists and Ask Science Mike podcasts, understands the pain of unraveling belief. In *Finding God in the Waves*, Mike tells the story of how his Evangelical faith dissolved into atheism as he studied the Bible, a crisis that threatened his identity, his friendships, and even his marriage. Years later, Mike was standing on the shores of the Pacific Ocean when a bewildering, seemingly mystical moment motivated him to take another look. But this time, it wasn't theology or scripture that led him back to God—it was science. Full of insights about the universe, as well as deeply personal reflections on our desire for certainty and meaning, *Finding God in the Waves* is a vital exploration of the possibility for knowing God in an age of reason, and a signpost for where the practice of faith is headed in a secular age. Among other revelations, we learn what brain scans reveal about what happens when we pray; how fundamentalism affects the psyche; and how God is revealed not only in scripture, but also in the night sky, in subatomic particles, and in us.

A fresh study of the groundbreaking work in genetics conducted by Gregor Mendel, acclaimed as the father of modern genetics, argues that the Moravian monk was far ahead of his time.

Analyzing the Role of Citizen Science in Modern Research

The Boy Who Drew Birds

A Book About Genes

Minn of the Mississippi

A Monk and Two Peas

Witness to a Revolution

The Friar Who Grew Peas

*Features Mr. Whiskers and his class performing seven activities which involve playing with and learning about matter in its liquid, solid, and gaseous forms, and includes a list of materials so readers can duplicate their experiments.*

*Thirteen African-American men and women who spoke up for freedom in the American Revolution are profiled in this work.*

*"Presents brief biographies of various Christian men and women who helped to shape the Christian faith and church throughout history. Written for ages seven and up!"--Provided by publisher.*

*Have you ever wondered what the future may look like? In this book, you'll explore 10 ways technology could alter our way of life. The challenge for you is to decide which changes you want for yourself and the world. In the future, will we teleport from place to place, keep dinosaurs as pets or 3D-print our dinner? Will we live on Mars or upload our brains to computers? Could we solve climate change by making all our energy from mini stars we build here on earth? This fascinating and thought provoking book from science writer Kathryn Hulick explores the possible futures humanity will face, and how we will live as the world around us changes beyond our recognition. From genetic engineering and building floating colonies in space to developing telepathic technology and bionic body alterations, this engagingly illustrated book looks into the possible future technologies which will shape how we live and how we adapt to the challenges of the future. In this book, you'll meet the scientists working to bring science fiction to life and learn how soon we might have amazing new technology. You'll also delve deep into questions about right and wrong. Just because we can do something doesn't mean we should. How can we build the best possible future for everyone on Earth?*

*Factor of Genetics*

*How I Lost My Faith and Found It Again Through Science*

*Behold the Beautiful Dung Beetle*

*The Story of Unshakable Mathematician Sophie Germain*

*From Mendel's Peas to Designer Babies*

*Flying High*

*Stories from Church History*

Gregor MendelThe Friar Who Grew PeasAbrams Books for Young Readers

Gregor Johann Mendel is known as the father of modern genetics. He used cross-breeding to develop different kinds of peas. This allowed him to make predictions about the outcomes. These are now called Mendel's Laws of Heredity. They explain how traits are passed from generation to generation. Mendel also discovered dominant and recessive genes.

Basic curiosity-driven biomedical science has delivered many of today's most significant medical advances. This book provides clearly explained examples from recent biomedical history and includes convincing arguments for sustaining a robust portfolio of basic research, intended as an engaging read, which will delight undergraduate and graduate students, as well as scientific researchers, it is full-throated advocacy of basic science. Illustrations and examples include the discoveries of penicillin and insulin, and the breakthrough elucidation of the genetic code. Providing both compelling rationale in support of basic science, and a fascinating look through the history of modern biomedical research, this book highlights with stirring examples why basic biomedical research is so important, and how so many key advances in medicine are derived from basic research. The book also offers a rationale for scientific inquiry and a broader understanding of the history of modern biomedical research missing from today's classrooms. Key Features 1) Provides clear explanations of great scientific discoveries 2) Illustrates connections between basic research findings and modern medicine 3) Includes compelling graphics/diagrams/illustrations 4) Accessible to the general public 5) Offers background for more specialized readers, including researchers as well as those with advanced degrees. Related Titles Staddon, J. Scientific Method: How Science Works, Fails to Work, and Pretends to Work (ISBN 978-1-1362-9536-0) Helliwell, J. R. Skills for Scientific Life (ISBN 978-1-4987-6875-7) MacRitchie, F. Scientific Research as a Career (ISBN 978-1-4398-6965-9)

Provides information about the mammoths and mastodons that roamed the Earth for millions of years.

Mammoths and Mastodons

Experiments in Plant-hybridisation

Mendel's Dwarf

The Case for Basic Biomedical Research

Bill Feet

Today's Curiosity Is Tomorrow's Cure

A Story of John James Audubon

HAVE YOU EVER wondered what makes you, You? Join Poppy on her journey into the fascinating world of her genetics. Learn how Poppy's genes created her red hair and blue eyes -- and trace these traits through her family tree. Poppy's genes are not the only things that help make her unique. discover, with Poppy, how your genes and the world around you can shape who you are. - What makes you unique? - Why do you look like your family? - What do genes have to do with it? Join Poppy to find out answers to these questions and more.

Gregor Mendel's discoveries were so far in advance of their day that it wasn't until 50 years had passed that their importance was recognised by the scientific community. Providing an account of scientific history, this work presents the narrative through the work of the life-scientists who built their own research on Mendel's discoveries.

Acclaimed as the most practical guide to plant tissue culture, the book is now even better and introduces new developments in biotechnology, such as genetic engineering and cell culture.

Widely regarded as the father of modern genetics, Austrian friar and scientist Gregor Mendel discovered that inherited traits do not blend together, as people once believed. By cultivating thousands of pea plants in his monastery garden and statistically analyzing the results, he was the first to determine how genes (which he called "heredity factors") function, and he coined the terms "dominant" and "recessive." This title traces the amazing story of Mendel's life and work, and relates Mendel's discoveries to our knowledge and application of genetics concepts today. The text supports the Common Core aims of understanding domain-specific vocabulary in science and analyzing the development of important ideas.

Dogs

The Impact of the Gene

Answering the Cry for Freedom

The One and Only Me

An Autobiography

The Lost and Found Genius of Gregor Mendel, the Father of Genetics

Materials and Techniques for Today's Artist

*Regarded as the world's first geneticist, Gregor Mendel overcame poverty and obscurity to discover one of the fundamental aspects of genetic science: animals, plants, and people all inherit and pass down traits following the same rules.*

*How genetics, and the technologies that arise from it, will affect the way we live in the twenty-first centuryIn the mid-nineteenth century, a Moravian friar made a discovery that was to shape not only the future of science but also that of the human race. With his deceptively simple experiments on peas in a monastery garden in Brno, Gregor Mendel was the first to establish the basic laws of heredity, laws from which the principles of modern genetics can be drawn. In this fascinating account, acclaimed science writer Colin Tudge traces the influence on science of Mendel's extraordinary ideas, from the 1850s to the present day, and goes on to ask what might happen in the coming century and beyond.A comprehensive and entertaining work that combines scientific history with a compelling discussion on the future trends of genetic technologies, "The Impact of the Gene" examines how the ideas that underpin the spectrum of all genetic issues are interrelated, and proposes that with a basic understanding of Gregor Mendel's theories and discoveries, all modern genetics falls easily into place. From a monastery garden to the laboratories of the twenty-first century, "The Impact of the Gene" provides a vital overview of the science of genetics, at once "enjoyable and informative . . . readable and entertaining" ("The New York Times Book Review").*

*The well-known author and illustrator relates the story of his life and work.*

*"A photographic collection exploring what the world eats featuring portraits of twenty-five families from twenty-one countries surrounded by a week's worth of food"--Provided by publisher.*

Gregor Mendel's Experiments on Plant Hybrids

Life of Mendel

Abe Lincoln Grows Up

The Monk in the Garden

The Pen and Ink Book

The Ocean of Truth

Genetics Pioneer

*Abigail Adams was an extraordinary woman who witnessed the gathering storm of the American Revolution and saw the battle of Bunker Hill from a hilltop near her home. Through her letters to friends and family, Abigail Adams lives in history--and now in this award-winning biography by Natalie Bober. Black & white illustrations .*

*This resource covers all the materials and techniques of drawing with ink,very type of pen, brush, ink, drawing surface and technique is described.*

*Explores the life of Gregor Mendel, an Austrian monk whose experiments with pea plants became a foundation for modern genetics.*

*The Story-book of Science*

*Robot Friends, Fusion Energy, Pet Dinosaurs, and More!*

*Trial and Triumph*

*Titans of the Ice Age*

*Nothing Stopped Sophie*

*The Story of Gymnastics Champion Simone Biles*