

“BOOKMARK!” HIGHLIGHTS BOOKS FROM A VARIETY OF GRADE LEVELS AROUND A PARTICULAR THEME. HERE IS A LIST OF ENGAGING, INFORMATIVE RECENTLY PUBLISHED BOOKS ON SCIENCE COMPILED BY CCBC LIBRARY COORDINATOR MEGHAN HOWE.

# Science Fun and Facts

## PICTURE BOOKS AND NON-FICTION FOR KINDERGARTEN TO GRADE 5

### Bye, Bye Butterflies! (A Tell-Me-More Storybook)

written by Andrew Larsen  
illustrated by Jacqueline Hudon-Verrelli  
(Fitzhenry & Whiteside, 2012)

When Charlie starts school, he gets the chance to become a “butterfly scientist” with his classmates as he learns how caterpillars turn into butterflies. Facts about the monarch butterfly’s life cycle, migration and more are included. Readers will also enjoy other books in the Tell-Me-More Storybook series.

### Counting on Fall (Math in Nature, Book 1)

written by Lizann Flatt  
illustrated by Ashley Barron  
(Owlkids Books, 2012)

Using poetic prose and cut-paper collages, this book introduces basic math and number sense through the patterns of the seasons. Other books in the series explore patterning, sorting, data management and probability; time and measurement; and geometry, symmetry and spatial sense.

### Going Up! Elisha Otis’s Trip to the Top (Great Idea, Book 4)

written by Monica Kulling  
illustrated by David Parkins  
(Tundra Books, 2012)

The young Elisha was fascinated by farm machinery, especially the hay hoist. In 1857, this creative inventor installed his first successful passenger elevator in a five-storey department store in New York City. Other books in the series feature inventors Margaret Knight, Elijah McCoy, George Eastman and Guglielmo Marconi.

### Motion, Magnets and More: The Big Book of Primary Physical Science

written by Adrienne Mason  
illustrated by Claudia Dávila  
(Kids Can Press, 2011)

This one-stop sourcebook of fun facts and hands-on activities answers kids’ tricky questions about the physical sciences. The “Touch It” section covers materials, matter, mass and magnets; “Build It” delves into structures, systems and shapes; “Change It” deals with solids, liquids and gases; and “Move It” discusses motion, forces, friction and gravity.

### Plesiosaur Peril (Tales of Prehistoric Life)

written by Daniel Loxton  
illustrated by Daniel Loxton and Jim W.W. Smith  
(Kids Can Press, 2014)

Author-illustrator Daniel Loxton uses stunning state-of-the-art computer-generated images to vividly re-create the undersea world of the Jurassic period. Readers follow the story of a baby plesiosaur, a marine reptile related to dinosaurs, whose curiosity about her new world in the ocean leads her to wander away from her mother. A must-read for young dinosaur lovers!

### The Queen’s Shadow: A Story About How Animals See

written and illustrated by Cybèle Young  
(Kids Can Press, 2015)

Based on the science behind the way animals see, this intriguing “surrealist whodunit” details the quest for the Queen’s stolen shadow. The Royal Detective, Mantis Shrimp, questions the guests — Chameleon, Shark, Lancehead Snake, Goat, Dragonfly, Colossal Squid, Pigeon and two sea urchins — to solve the mystery.

### The Slug (Disgusting Critters)

written and illustrated by Elise Gravel  
(Tundra Books, 2014)

Gravel hilariously explores such topics as the slug’s two pairs of tentacles for seeing and for smelling (it sees you’re a kid and you smell like broccoli) and its mucous covering (handy for following another’s mucous trail). Other critters covered in the series include flies, head lice, spiders and worms.



### Weeds Find a Way

written by Cindy Jensen-Elliott  
illustrated by Carolyn Fisher  
(Beach Lane Books, 2014)

Persistent, exuberant... weeds have personalities, and this beautiful non-fiction picture book puts them on colourful display! From bright yellow dandelions in sidewalk cracks to purple loosestrife growing along roadways, weeds add unexpected splashes of colour and life in the least likely places.

### Whoosh! A Watery World of Wonderful Creatures

written by Marilyn Baillie  
illustrated by Susan Mitchell  
(Owlkids Books, 2014)

Reading about splashing like a dolphin or hiding like a clownfish gets kids thinking about creatures that love water as much as we do. Each spread shows an animal in a watery scene on one side and a child mimicking the animal's activity on the other. The echoing images bring to life the real ways that animals behave.

### Why? The Best Ever Question and Answer Book About Nature, Science and the World Around You

written by Catherine Ripley  
illustrated by Scot Ritchie  
(Owlkids Books, 2010)

This 10th-anniversary edition provides kid-friendly explanations for nearly 100 everyday mysteries. Divided into six sections — Bathtime Questions, Supermarket Questions, Nighttime Questions, Outdoor Questions, Kitchen Questions and Farm Animal Questions — this charmingly illustrated book will thrill inquisitive young readers.

### Winter's Coming: A Story of Seasonal Change

written by Jan Thornhill  
illustrated by Josée Bisailon  
(Owlkids Books, 2014)

Lily, a snowshoe hare, hears that winter is coming — but who or what is winter? She watches blackbirds fly south, a squirrel hide food and a frog disappear under a rock... how should she prepare? A great introduction to animal adaptation. Readers can also explore migration in Thornhill's *Is This Panama? A Migration Story*.

### You Are Stardust

written by Elin Kelsey  
illustrated by Soyeon Kim  
(Owlkids Books, 2012)

This innovative and beautifully illustrated book reminds young readers of our innate relationship with the natural world, based on the idea that every atom in our bodies came from a star that exploded long ago.

### JUNIOR, INTERMEDIATE & SENIOR NON-FICTION AND FICTION FOR GRADES 3 TO 10

### Before the World Was Ready: Stories of Daring Genius in Science

written by Claire Eamer  
illustrated by Sa Boothroyd  
(Annick Press, 2013)

Read about eight great scientists whose ideas changed the world but whose theories were not readily accepted in their time — from Copernicus's sun-centred model of the universe in the 16th century to Rachel Carson's warnings about the dangers of pesticides in the 20th century.

### Branching Out: How Trees Are Part of Our World

written by Joan Marie Galat  
(Owlkids Books, 2014)

Profiling 11 trees, from familiar ones such as the red maple to lesser-known ones like the tall-stilted mangrove, this book highlights the complex ways trees are part of our society, culture and economy. The symbiotic relationship between trees and animals is also explored.

### Case Closed? Nine Mysteries Unlocked by Modern Science

written by Susan Hughes  
illustrated by Michael Wandelmaier  
(Kids Can Press, 2010)

Readers will explore nine historical case files, meet investigators who are researching each mystery and study the tools and techniques at their disposal. As modern science sheds new light on ancient and recent mysteries, readers will learn whether these scientific detectives can finally declare — CASE CLOSED!

### The Case of the Missing Moonstone (The Wollstonecraft Detective Agency, Book 1)

written by Jordan Stratford  
illustrated by Kelly Murphy  
(Alfred A. Knopf, 2015)

History, mystery and science collide in a new series based on two real historical figures. Lady Ada Byron, age 11, is a genius. Mary Godwin, age 14, is a romantic. Together, the girls form a secret detective agency, for the apprehension of clever criminals, using math, science and analytical thinking.



**Earth's Cycles**  
(*Earth's Cycles in Action*)  
written by Diane Dakers  
(Crabtree Publishing, 2014)

With informative text, vivid photographs and detailed diagrams, this useful title explains the patterns and cycles created on Earth by the influence of the Sun and the Moon, as well as by the Earth's magnetic poles and the planet's rotation. Other books in the series include *The Carbon Cycle*, *Earth's Water Cycles* and *The Nitrogen Cycle*.

**Every Last Drop:**  
**Bringing Clean Water Home**  
(*Orca Footprints*)  
written by Michelle Mulder  
(Orca Book Publishers, 2014)

For millions worldwide, finding clean water is a daily challenge. Mulder looks at the innovative ways communities are finding to quench their thirst — from drinking fog in Chile to using biosand filters in Afghanistan. Other topics in the series include cycling, food production, sustainable energy, waste reduction and housing.

**Evolution: How We and All Living Things Came to Be**  
written and illustrated by Daniel Loxton  
(Kids Can Press, 2010)

This comprehensive introduction includes topics from Charles Darwin to modern-day science, and answers such frequently asked questions as how do we know that evolution happens and, if it does, where are the transitional fossils? Enhanced with computer-generated images, illustrations and photographs, this is a fascinating read.

**Fuzzy Forensics:**  
**DNA Fingerprinting Gone Wild**  
written by L.E. Carmichael  
(Ashby-BP Publishing, 2014)

Endangered parrots taken from the wild and sold as pets, African elephants butchered for their ivory tusks — explore real cases from the crime scene to the laboratory to the courtroom. See how DNA fingerprints can identify endangered species, match animal parents with their wild babies, and trace a furry victim's country of origin. Winner of the 2014 Lane Anderson Award.

**Half Brother**  
written by Kenneth Oppel  
(HarperCollins Publishers, 2010)

As Ben's family and a team of scientists attempt to teach Zan, the baby chimp, how to communicate using American Sign Language, they discover the complexities of humanizing a wild animal. In this thought-provoking novel, Ben risks everything he loves in order to save his "baby brother." Older teens will enjoy Oppel's *This Dark Endeavour*.

**Dirty Science:**  
**25 Experiments with Soil**  
written by Shar Levine and Leslie Johnstone  
illustrated by Lorenzo Del Bianco  
(Scholastic Canada, 2013)

Fun experiments help budding scientists discover interesting things to do with dirt while learning about the ground beneath their feet — from discovering the unseen critters that roam our lawns to learning how to change a pink flower into a blue one. Other titles in the series include *Hockey Science*, *Scary Science* and *Snowy Science*.

**If: A Mind-Bending New Way of Looking at Big Ideas and Numbers**  
written by David J. Smith  
illustrated by Steve Adams  
(Kids Can Press, 2014)

This intriguing guide to understanding huge ideas and numbers uses clever devices to scale down everything from timelines (the history of Earth compressed into one year), to quantities (all the wealth in the world divided into one hundred coins), to size differences (the planets shown as different types of balls).

**Impossible Science**  
(*Mystery Files*)  
written by James Bow  
(Crabtree Publishing, 2012)

Humans are always reaching to make new discoveries. Science often holds the key to uncovering mysteries, yet some things remain beyond our grasp. Young readers will learn the facts about the possibilities for eternal youth, creating life, moving faster than the speed of light, alien life and time travel.

**It's Catching: The Infectious World of Germs and Microbes**  
written by Jennifer Gardy  
illustrated by Josh Holinaty  
(Owlkids Books, 2014)

Microbiologist Jennifer Gardy — "disease detective" — picks up her microscope to bring expert insight to the microbes that are all around us. Irreverent, playful and contagiously fun, this book explains a variety of germs and the diseases they cause, from the common cold to Ebola.



### **Nibbling on Einstein's Brain: The Good, the Bad and the Bogus in Science**

written by Diane Swanson  
illustrated by Francis Blake  
(Annick Press, 2009)

Swanson equips kids with strategies on how to tell the difference between legitimate science and sketchy science. This informative book, which promotes critical-thinking skills, features artwork that lends levity to the serious content.

### **On a Scale from Idiot to Complete Jerk: A Highly Scientific Study of Annoying Behavior**

written by Alison Hughes  
(Orca Book Publishers, 2014)

When Grade 8 science-project time rolls around, J.J. Murphy dives into research about jerks. By J.J.'s estimation, his science project, *On a Scale from Idiot to Complete Jerk*, is groundbreaking, exhaustive, highly scientific and seriously worthy of bonus marks!

### **Pandemic Survival: It's Why You're Alive**

written by Ann Love and Jane Drake  
illustrated by Bill Slavin  
(Tundra Books, 2013)

Delving into the history of many diseases, the authors offer an in-depth look at the causes, symptoms and often bizarre cures that were administered to the sick and dying. They also discuss the evolution of medicine and introduce readers to the pioneers who discovered vaccines, stressed the importance of cleanliness and invented antibiotics.

### **Patient Zero: Solving the Mysteries of Deadly Epidemics**

written by Marilee Peters  
(Annick Press, 2014)

Peters takes readers on a spine-chilling journey through time and across continents, following the scientists who solved the mysteries of seven killer epidemics. This is a gripping tale of how disease spreads, and it reminds us that millions of people owe their lives to the work of these pioneer epidemiologists.

### **Shapes in Math, Science and Nature: Squares, Triangles and Circles**

written by Catherine Sheldrick Ross  
illustrated by Bill Slavin  
(Kids Can Press, 2014)

Blow cube-shaped bubbles! Ace paper-air-plane making! Three books in the popular *Shapes in Math, Science and Nature* series are now available in one compilation. Fun illustrations, informative text and fantastic hands-on activities and puzzles introduce readers to the basics of geometry and its myriad applications!

### **The Source of Light**

written by David Richards  
(ThistleDown Press, 2011)

Badger and Mike, two 17-year-olds, seek answers to serious questions about Mike's mom's infidelity and his dad's involvement in industrial espionage. Against a backdrop of the synchrotron, the world's most powerful microscope, the boys and their friend Angie begin an operation that will change the lives of everyone they know.

### **Starting from Scratch: What You Should Know about Food and Cooking**

written by Sarah Elton  
illustrated by Jeff Kulak  
(Owlkids Books, 2014)

This book is a manifesto on food, inspiring both budding chefs and food lovers in the process! Recipes are demystified and cooking is boiled down to the basics, inspiring kids to go beyond the pre-packaged meal, to eat better and to understand what's on their plate.

### **Tastes Like Music: 17 Quirks of the Brain and Body**

written by Maria Birmingham  
illustrated by Monika Melnychuk  
(Owlkids Books, 2014)

Readers will come away amazed by all the weird and wonderful things the human brain and body can do. Whether it's having no fingerprints at all (adermatoglyphia) or hearing music every time you taste chocolate (synesthesia), these conditions bring our understanding of the human body to another level entirely.

### **Zoobots: Wild Robots Inspired by Real Animals**

written by Helaine Becker  
illustrated by Alex Ries  
(Kids Can Press, 2014)

Science fiction comes to life in this riveting showcase of zoobots — robots inspired by animals! Meet Squeeze, an octobot based on the octopus; Sliver, a serpentine bot based on snakes; and 10 other fascinating robots. Science buffs will also enjoy Becker's *The Insecto-Files* and *Magic Up Your Sleeve*.

