Science

Recommended Reading List



Key Stage 3

Autobiography

MUD. SWEAT AND TEARS

Mud, Sweat and Tears

Bear Grylls is a man who has always sought the ultimate in adventure. Growing up on the Isle of Wight, he was taught by his father to sail and climb at an early age. As a teenager he found identity and purpose through both mountaineering and martial arts, which led the young adventurer to the foothills of the mighty Himalaya and a grandmaster's karate training camp in Japan.

On returning home, he embarked upon the notoriously gruelling selection course for the British Special Forces to join 21 SAS - a journey that was to push him to the very limits of physical and mental endurance. Then, in a horrific free-fall parachuting accident, Bear broke his back in three places. It was touch and go whether he would ever walk again. However, only eighteen months later Bear became one of the youngest ever climbers to scale Everest, aged only twenty-three. But this was just the beginning of his many extraordinary adventures.



Accidental Adventurer

Ben Fogle's life has been action-packed to say the least. He has rowed across the Atlantic, walked to the South Pole, run the Sahara, and iceskated across Sweden. He has encountered isolated tribes in deepest Papua New Guinea, caused a Boeing 747 to dump £100k of fuel before making an emergency landing in Sao Paolo, and frequently been mistaken for Prince William along the way.

So how did a cripplingly shy, geeky, perennially homesick boy end up doing all this? Ben's still not entirely sure himself, but this wonderful book tells his story and will strike a chord with anyone puzzling about life, and how to live it differently.



The Crocodile Hunter: The Incredible Life and Adventures of Steve and Terri Irwin

For the Crocodile Hunter, aka Steve Irwin, made famous by the cult hit Discovery Channel programme, caring for aggressive 14-foot crocodiles, the world's deadliest snakes, venomous spiders, and powerful lizards at the private zoo he and his wife run in Australia are all in a day's work. In his new book, THE CROCODILE HUNTER, Steve tells his real-life story of growing up amongst some of the world's most lethal animals, how he met his wife Terri and of dedicating their life to protecting wildlife and nature.



History of Science

Medical Milestones and Crazy Cures

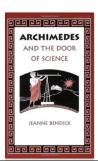
Think you know your Smallpox from your Bubonic Plague? Try testing your knowledge of the history of medicine!

- a) What did the Ancient Egyptians treat with powdered ostrich egg?
- b) How did body snatchers help 19th-century medical students?
- c) Why did the Ancient Romans recommend drinking wee?

ANSWERS: Dive in and find out!

Dr Chris and Dr Xand draw back the bed curtains of history to take you on a tour of the body, revealing the gruesome secrets of medicine through the ages.





Archimedes and the Door of Science

Jeanne Bendick, through text and pictures, admirably succeeds in bringing to life the ancient Greek mathematician who enriched mathematics and all branches of science. Against the backdrop of Archimedes's life and culture, the author discusses the man's work, his discoveries and the knowledge later based upon it. The simple, often humorous, illustrations and diagrams greatly enhance the text. Ages 10 and up.



Galen and the Gateway to Medicine

We know about Hippocrates, the Father of Medicine. But we owe nearly as much to Galen, a physician born in 129 A.D. at the height of the Roman Empire. Galen's acute diagnoses of patients, botanical wisdom, and studies of physiology were recorded in numerous books, handed down through the Middle Ages and Renaissance. Not least, Galen passed on the medical tradition of respect for life. In this fascinating biography for young people, Jeanne Bendick brings Galen's Roman world to life with the clarity, humour, and outstanding content we enjoyed in Archimedes and the Door to Science.



On a Beam of Light: A Story of Albert Einstein

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 Space Race

The Space Race tells the story of human spaceflight, from the dawn of rocketry to the Apollo moon landings. Every crewed American spaceflight is included, from Project Mercury to Gemini to Apollo. Also covered are vital details about important Soviet spaceflights, as well as America's space shuttle, the International Space Station, and planned future missions. Why did Neil Armstrong almost crash the Eagle lunar lander before becoming the first person to walk on the moon? Who was the first person to vomit in space? Who peed in his spacesuit while still on the launchpad? These questions and many more are answered in these inspiring—and sometimes humorous— stories of triumph, tragedy, and determination. The Space Race is based on the bestselling hardcover series, now expanded, and combined into a single-volume eBook for the first time.



Horrible Science Collection

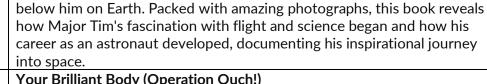
Horrible Science is a similar series of books to Horrible Histories, written by Nick Arnold (except for Evolve or Die, which is written by Phil Gates), illustrated by Tony de Saulles and published in the UK and India by Scholastic. They are designed to get children interested in science by concentrating on the trivial, unusual, gory, or unpleasant. The books are in circulation in 24 countries, and over 4 million books have been sold in the UK alone.

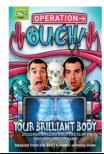




Ground Control to Major Tim

Aimed at children inspired by Major Tim Peake's adventures in space, this 32-page book looks at the history-making career of the man who, in 2016, became the first British astronaut to live and work on the International Space Station. During his time on board the ISS, Tim Peake carried out experiments, performed a crucial spacewalk and took some awesome photographs. He also found time to run a marathon, present an award to Adele and read a bedtime story to children listening 400km





Your Brilliant Body (Operation Ouch!)

Can you guess which of these amazing facts Operation Ouch! has in store for you?

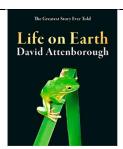
- a) That in your lifetime you'll spend a whole year on the toilet
- b) That you shed at least 30,000 skin cells every day
- c) That the biggest muscle in your body is in your bum ANSWER: All three of course!

Join Dr Chris and Dr Xand as they take a tour of YOUR BRILLIANT BODY!



Beyond the Sky and the Universe

So, you want to go into space? WHY?! (No, really - it's sort of a terrible idea. We humans are perfectly designed for life on Earth. We can walk around, breathe, drink water, eat vegetables, read books, not get poisoned or crushed to death when we go outside - it's lovely right where we are.) Not convinced? GOOD! People have been dreaming about space travel for centuries - there's something amazing about the idea of leaving our planet behind and setting out to explore the Universe - there's so much we still don't know. UK and Ireland's best-loved comedian Dara O Briain takes you on a journey from the safety of your comfiest chair to the furthest reaches of space (and beyond!)



Life on Earth

David Attenborough's unforgettable meeting with gorillas became an iconic moment for millions of television viewers. Life on Earth, the series and accompanying book, fundamentally changed the way we view and interact with the natural world setting a new benchmark of quality, influencing a generation of nature lovers.

Told through an examination of animal and plant life, this is an astonishing celebration of the evolution of life on earth, with a cast of characters drawn from the whole range of organisms that have ever lived on this planet. Attenborough's perceptive, dynamic approach to the evolution of millions of species of living organisms takes the reader on an unforgettable journey of discovery from the very first spark of life to the blue and green wonder we know today.

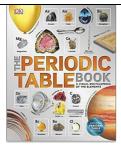


The Science Book: Big Ideas Simply Explained

Discover 80 trail-blazing scientific ideas, which underpin our modern world, giving us everything from antibiotics to gene therapy, electricity to space rockets and batteries to smart phones.

What is string theory or black holes? And who discovered gravity and radiation? The Science Book presents the fascinating story behind these and other of the world's most important concepts in maths, chemistry, physics, and biology in plain English, with easy to grasp "mind maps" and eye-catching artworks.

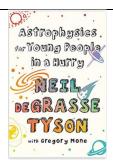
Albert Einstein once quoted Isaac Newton: "If I have seen further than others, it is by standing on the shoulders of giants." Follow context panels in The Science Book to trace how one scientist's ideas informed the next. See, for example, how Alan Turing's "universal computing machine" in the 1940s led to smart phones, or how Carl Linnaeus's classifications led to Darwin's theory of evolution, the sequencing of the human genome and lifesaving gene therapies.



The Periodic Table Book: A Visual Encyclopaedia of the Elements

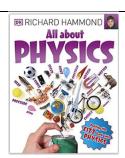
This encyclopaedia is a superb introduction to the subject of chemistry. Written with kids ages 9 to 12 in mind, using easy to understand language and straightforward fun facts. There's information on the scientists that made the first discoveries, and spectacular photos of large natural features, along with a simple explanation of what an atom is. Find out which of the things we see every day contain these common and unusual elements.

There's so much to discover about different elements, their atomic structure with the number of electrons, protons, and neutrons, and the three states, solid, liquid or gas. Kids will learn that the copper used in computer motherboards is also what the Statue of Liberty is made of, and why it's green. Also learn about elements like Zinc - why the Japanese Akashi Bridge is coated in zinc, and why zinc is used in the soles of wellies to make the rubber tougher.



Astrophysics for Young People in a Hurry

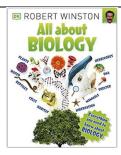
America's most celebrated astrophysicist invites young readers to explore the mysteries of the universe. Neil deGrasse Tyson has become one of the most recognisable and respected figures in science. In this adaptation of his The New York Times bestseller Astrophysics for People in a Hurry, Tyson has for the first time served up the universe in a handy, portable package designed specifically for young readers. From the difference between a star and a supernova to what matter and dark matter really are, Astrophysics for Young People in a Hurry will turn young people into budding experts on the fundamental rules and unknowns of our universe. Along the way, Tyson's characteristic wit ensures a journey packed with fun.



All About Physics (Big Questions)

Richard Hammond explains physics in this popular, award-winning series, from the discoveries of ancient Greece to Einstein via Galileo and Newton.

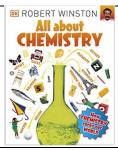
Physics doesn't just happen in a lab - it happens in the kitchen, in your bath, in a car! All About Physics shows you how science affects everything, from rollercoasters to fighter pilots. Join a thrilling highenergy journey through time, space and beyond and find out about the physical forces that make our world what it is. Experience some "light" reading about waves and the electromagnetic spectrum; get stuck into friction; and feel the heat with temperature. You can also find out the answers to age-old scientific questions such why the sky is blue, and to more obscure conundrums, such as why golf balls have dimples.



All About Biology (Big Questions)

The ever-dynamic Professor Robert Winston takes readers of all ages on a journey through life on Earth, showing how organisms live and survive on our "Goldilocks planet".

All About Biology covers all the key topics including cells, the six kingdoms of life (eubacteria, archaeobacteria, protists, fungi, plants, and animals), anatomy, behaviour, feeding, evolution, migration, photosynthesis, reproduction and more. Join in the discussions about whether people are the ultimate animals; which is the weirdest life form; and whether there's any alien life in the Universe.



All About Chemistry (Big Questions)

Elements make up everything around us - our computers, our bodies, our foods, and drinks. They make up trees and grass, cars, and roads, and are the fundamental building blocks of our incredible world.

Robert Winston takes children of all ages on a scientific adventure through the explosive world of atoms, elements, and the periodic table in this outstanding educational book for kids.

This kids' science book is designed with easy-to-understand, kid-friendly

	language, questions, and fun facts. The contents are clearly organised, while the bold, colourful design and engaging stories work together to make learning about the elements a fun and exciting experience for budding scientists.
when the fifth provide and the state of the	The Disappearing Spoon Why did Gandhi hate iodine (I, 53)? Why did the Japanese kill Godzilla with missiles made of cadmium (Cd, 48)? How did radium (Ra, 88) nearly ruin Marie Curie's reputation? And why did tellurium (Te, 52) lead to the most bizarre gold rush in history? The periodic table is one of our crowning scientific achievements, but it's also a treasure trove of passion, adventure, betrayal, and obsession. The fascinating tales in The Disappearing Spoon follow carbon, neon, silicon, gold, and every single element on the table as they play out their parts in human history, finance, mythology, conflict, the arts, medicine, and the lives of the (frequently) mad scientists who discovered them. Why did a little lithium (Li, 3) help cure poet Robert Lowell of his madness? And how did gallium (Ga, 31) become the go-to element for laboratory pranksters? The Disappearing Spoon has the answers, fusing science with the classic lore of invention, investigation, discovery, and alchemy, from the big bang through to the end of time.
DELECTIVES TOP TIPS TO TRACK WILDLIFE STEVE BACKSHALL	Deadly Detectives: Top Tips to Track Wildlife Finding wildlife is rarely easy - unless you're Steve Backshall! In DEADLY DETECTIVES Steve tells young trackers everything they need to know about the origins of tracking, what you need to become a tracker and how to do it, whether the wild world is your own back garden, ancient woodlands, the riverside, or coast. He illustrates his tips with examples of his own detective work on land and in the water from tropical rainforests to the African Savannah, from the Arctic tundra to the desert. Join him as footsteps, feeding habits and even a pile of pooh reveal snow leopards, crocodiles, gators, snakes, and polar bears, while closer to home you can track foxes, squirrels, badgers, and birds, using the same techniques.
David Thorpe	Science Fiction Hybrids
Douglas Adams	The Hitchhiker's Guide to the Galaxy
HG Wells	War of the Worlds
Jules Verne	Journey to the Centre of the Earth
Malorie Blackman	Pig-Heart Boy
Nicola Morgan	Flesh Market
Patrick Ness	The Knife of Never Letting Go
Dhilin Dagya	Louidink Trilon.

Larklight Trilogy

Uglies
The Discworld Series

Philip Reeve

Scott Westerfield
Terry Pratchett