

KS5 Supercurricular BIOLOGY

Reading

Frances Ashcroft

The Spark of Life: Electricity in the Human Body

Sir David Attenborough

Adventures of a Young Naturalist: Sir David Attenborough's Zoo Quest Expeditions Journeys to the Other Side of the World: further adventures of a young David Attenborough Life on Earth

Bill Bryson

A Short History of Nearly Everything

Nessa Carey

Junk DNA: A Journey Through the Dark Matter of the Genome Hacking the Code of Life: How gene editing will rewrite our futures The Epigenetics Revolution: How Modern Biology is Rewriting our Understanding of Genetics, Disease and Inheritance

JV Chamary

50 Biology Ideas You Really Need to Know

Daniel Chamovitz

What A Plant Knows

Charles Darwin

The Origin of the Species: By Means of Natural Selection

Richard Dawkins

The Selfish Gene The Blind Watchmaker Unweaving the Rainbow Climbing Mount Improbable The Ancestor's Tale

Jonathan Drori

Around the World in 80 Trees

Kevin Fong

Extremes: How Far Can You Go to Save a Life? Extreme Medicine: How Exploration Transformed Medicine in the Twentieth Century

Barry Gibb

The Rough Guide to the Brain (Rough Guides Reference Titles)

Peter Godfrey-Smith

Other Minds: The Octopus and the Evolution of Intelligent Life

David S. Goodsell

The Machinery of Life

Christian Jarrett

Great Myths of the Brain

Steve Jones

Y: The Descent of Men In the Blood: God, Genes and Destiny Almost Like a Whale: The 'Origin of Species' Updated The Language of the genes

Elmer W Koneman

The Other End of the Microscope: The Bacteria Tell Their Own Story

Nick Lane

Life Ascending: The Ten Great Inventions of Evolution Power, Sex, Suicide: Mitochondria and the meaning of life The Vital Question: Why is life the way it is?

Richard Leaky

The Origin of Humankind

Armand Marie Leroi

Mutants: On the Form, Varieties and Errors of the Human Body

Ernst Mayr

This Is Biology: The Science of the Living World

Barbara Natterson Horowitz and Kathryn Bowers

Zoobiquity: What Animals Can Teach Us About Being Human

Steve Pinker

The Language Instinct

Matt Ridley

Genome: The Autobiography of a Species in 23 Chapters The Red Queen: Sex and the Evolution of Human Nature The Language of Genes Francis Crick: Discoverer of the Genetic Code Nature Via Nurture: Genes, Experience and What Makes Us Human

Alice Roberts

The Incredible Unlikeliness of Being: Evolution and the Making of Us Tamed: Ten Species that Changed our World

Oliver Sachs:

The Man Who Mistook His Wife for a Hat

Thomas D. Seeley

Honeybee Democracy

Rebecca Skloot

The Immortal Life of Henrietta Lacks

Lewis Thomas

The Lives of a Cell: Notes of a Biology Watcher. The Medusa and the Snail: More Notes of a Biology Watcher James Watson DNA: The Secret of Life The Double Helix: Personal Account of the Discovery of the Structure of DNA

George C. Williams Plan and Purpose in Nature

Edward O Wilson *The Diversity of Life The Future of Life Half-Earth: Our Planet's Fight for Life*













Listening, viewing and doing

BBC iPlayer Science & Nature	https://www.bbc.co.uk/iplayer/categories/science-and- nature/featured
BBC news stories – science and the environment	https://www.bbc.co.uk/news/science and environment
BBC news stories – health	https://www.bbc.co.uk/news/health
Biology: Changing the World celebrates the great biologists of the past in order to inspire those of the future. The website and mobile app are packed with information and activities about the biologists that shaped the world we live in.	https://biologyheritage.rsb.org.uk/bcw
There are dozens of great science and nature podcasts to listen to. Find out how to access them and get listening here, as well as reading our reviews.	https://www.discoverwildlife.com/how-to/how-to-listen-to- podcasts/
Get lost in the magic of nature without ever leaving the living room. Check out our favourite nature-focused podcasts,	https://www.forestryengland.uk/blog/top-nature-podcasts
Science Podcast - Scientific principles, theory, and the role of key figures in the advancement of science.	https://www.bbc.co.uk/programmes/p01gyd7j/episodes/downloads
Prostate cancer, earthworms, neuroscience you'll find an interesting podcast here!	https://podcasts.ox.ac.uk/keywords/biology
Podcasts, news and interviews with scientists about recent scientific developments	http://royalsociety.org
Based at Cambridge University's Institute of Continuing Education (ICE), the Naked Scientists are a team of scientists, doctors and communicators whose passion is to help the general public to understand and engage with the worlds of science, technology and medicine.	https://www.thenakedscientists.com/
TedEd- carefully curated educational videos, many of which represent collaborations between talented educators and animators.	https://www.youtube.com/teded/playlists
Crash Course Biology - high quality, entertaining educational videos	https://www.youtube.com/c/crashcourse/playlists?view=50&sort=d d&shelf_id=7
Amoeba Sisters- two sisters on a mission to demystify science with humour and relevance by creating videos, GIFs, comics, and resources.	https://www.youtube.com/c/AmoebaSisters

Khan Academy- well-explained, detailed videos on a range of topics.

Information about some of the most important scientific discoveries, and the scientists behind them.

iBiology's mission is to convey, in the form of open-access free videos, the excitement of modern biology and the process by which scientific discoveries are made.

Oxford Sparks is a portal for engaging with a wealth of exciting science taking place across Oxford University

The IntoBiology website aims to inform and inspire the next generation of biologists. They support UK biology students aged between 17 and 21, with science news, careers guidance, and study skills support. They are funded by the Gatsby Charitable Foundation and based at the University of Cambridge.

'What if?' takes a look at some absurd hypothetical questions and gives serious scientific answers to them.

FutureLearn online science, engineering, and maths courses cover a wide and fascinating range of subjects. A lot of courses are free and they're provided by leading global institutions.

The London Natural History Museum's website with lots of interesting educational material

https://www.youtube.com/c/khanacademy/playlists?view=50&sort =dd&shelf_id=3

https://www.nobelprize.org/prizes/medicine

https://www.ibiology.org/

https://www.oxfordsparks.ox.ac.uk/

http://intobiology.org.uk/

https://what-if.xkcd.com/144/

https://www.futurelearn.com/subjects/nature-and-environmentcourses, https://www.futurelearn.com/subjects/scienceengineering-and-maths-courses/biology-and-biotechnology, https://www.futurelearn.com/subjects/nature-and-environmentcourses/ecology

http://www.nhm.ac.uk





BBC

NEWS

<u>Magazines</u>

BBC Science Focus - concerned with the human mind and body, medical science and biology, and the effects of modern life on our health and wellbeing.

National Geographic – a truly breathtaking glimpse into the wild and wonderful nature of the world around us.

BBC Wildlife Magazine - the UK's oldest and best wildlife magazine with the best photographers and most knowledgeable writers to celebrate truly awe-inspiring animals and habitats.

The Scientist is a magazine dedicated to covering a wide range of topics central to the study of cell and molecular biology, genetics, and other lifescience fields.

Nature is a weekly international journal publishing the finest peer-reviewed research in all fields of science and technology on the basis of its originality, importance, interdisciplinary interest, timeliness, accessibility, elegance and surprising conclusions.

New Scientist is the world's most popular weekly science and technology publication, covering international news from a scientific standpoint, and asking the big-picture questions about life, the universe and what it means to be human.

Topical articles, cutting-edge research and expert exam advice will deepen your subject knowledge and help you to develop independent learning skills.









https://www.hoddereducation.co.uk/biologicalsciencesreview



https://www.magazine.co.uk/education-magazines/focus-magazine

https://www.magazine.co.uk/magazines/national-geographicmagazine, https://www.nationalgeographic.com/magazine

https://www.buysubscriptions.com/print/bbc-wildlife-magazinesubscription

https://www.the-scientist.com/

https://www.nature.com/

https://www.newscientist.com/





Visiting- local places to enhance your understanding

https://www.birminghambotanicalgardens.org.uk/ Birmingham Botanical Gardens, Birmingham http://www.cannonhillpark.co.uk/nature-centre Nature Centre Cannon Hill Park, Birmingham Thinktank Science Museum, Birmingham Falconry Centre, Hagley Butterfly Farm, Stratford-upon-Avon. West Midlands Safari Park, Bewdley Sea Life Centre, Birmingham The Wildlife Trust for Birmingham and the Black Country. Explore a local nature reserve – make



https://www.birminghammuseums.org.uk/thinktank

https://thefalconrycentre.co.uk/

https://www.butterflyfarm.co.uk/attraction/

https://www.wmsp.co.uk/

https://www.visitsealife.com/birmingham/

https://www.bbcwildlife.org.uk/nature-reserves

National competitions

The Nancy Rothwell Award celebrates specimen drawing in schools and highlights the benefits of combining art and science.

sure you go with an adult!

'Communication' is the theme of this year's Royal Society of Biology Photography Competition. The top prize? £500 for you to keep!

Annual science essay competition 'Peterhouse Kelvin Science and Medicine Prize' – ask your biology teacher first as there is a limit on entry numbers! The top prize? £500 for you to keep! https://www.rsb.org.uk/get-involved/rsb-awards/nancy-rothwell-award

https://www.rsb.org.uk/get-involved/rsb-competitions/photographycompetition

https://www.pet.cam.ac.uk/essay-prizes

