

Extended Learning



Sixth Form

Biology

In order to truly excel in Biology, you will need to do some extra reading about the topics you are learning in lessons. Extra reading brings numerous benefits:

- It helps to put the new ideas that you are learning about in your lessons in context.
- It helps you to broaden your knowledge – your A-level specification doesn't cover everything.
- It allows you to spend more time learning about topics that particularly interest you.
- Biology is a fast-moving subject, and there are always new discoveries to find out more about.
- When applying for some Uni degrees you may need to discuss your wider reading at interview.
- You can't achieve top marks in your essay without showing knowledge beyond the specification.

Where can you start?

- **Books:** Pick books that really interest you, and you are more likely to finish them, understand them, and remember them. Here are some suggestions:
 - Genetics
 - The Immortal Life of Henrietta Lacks. Skloot, R.
 - The Language of the genes. Jones, S.
 - The Serpent's Promise. Jones, S.
 - In the blood. Jones, S.
 - Y: the Descent of Men. Jones, S.
 - Genome. Ridley, M.
 - DNA: The Secret of Life. Watson, J.
 - Double Helix: Personal Account of the Discovery of the Structure of DNA. Watson, J.
 - Mutants: On the Form, Varieties and Errors of the Human Body. Leroi, AM.
 - Evolution
 - On the origin of species. Darwin, C.
 - The Beak of the Finch. Weiner, J.
 - Almost Like a Whale. Jones, S.
 - A Devil's Chaplain. Dawkins, R.
 - The Selfish Gene. Dawkins, R.
 - The Blind Watchmaker. Dawkins, R.
 - Wonderful Life. Gould, SJ.
 - Dinosaur in a Haystack. Gould, SJ.
 - Trilobite. Fortey, RA.
 - The Rise and fall of the Third Chimpanzee. Diamond, J.
 - The Ancestor's Tale. Dawkins, R.
 - Physiology
 - The Thinking Ape: Evolutionary Origins of Intelligence. Byrne, R.
 - The Kiwi's Egg; Charles Darwin and Natural Selection. Quammen, D.
 - The Greatest Show on Earth. Dawkins, R.
 - The Seven Daughters of Eve. Sykes B.
 - Physiology
 - Why Elephants Have Big Ears. Lavers, C.
 - The Energy of Life. Brown, G.
 - Keep on Running. Newsholme, Leech, Duester.
 - Power, sex, suicide: mitochondria & the meaning of life. Lane, N.
 - Oxygen. Lane, N.
 - Life at the Extremes. Ashcroft, F.
 - Immunology
 - Immunology: Comparative Approach. Turner, RJ.
 - Friendly Fire: Explaining Auto-immune disease. Isenrg, E.
 - Neuroscience/Psychology
 - The Man Who Mistook His Wife for a Hat. Sacks, O.
 - An Anthropologist on Mars. Sacks, O.
 - Awakenings. Sacks, O.
 - Mapping the Mind. Carter, R.

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- How the Mind Works. Pinker, S.
- The Language Instinct. Pinker, S.
- The Brain Story. Greenfield, S.
- Microbiology
 - Missing microbes. Blaser, M.
 - Gut: The inside story of the body's most underrated organ. Enders, G.
- Others
 - The Machinery of Life. Goodsell, D.
 - This Is Biology: The Science of the Living World. Mayr, E.
 - Plan and Purpose in Nature. Williams, GC
 - The Diversity of Life. Wilson, EO.
 - The Origin of Humankind. Leaky, R.
 - A Short History of Nearly Everything. Bryson, B.
 - What A Plant Knows. Chamovitz, D.

There is a small collection of Biology books (including some of the ones above!) in room 318 that you are more than welcome to borrow.

- **Publications:** Some publications such as *New Scientist* or *Biological Sciences Review* are really useful and interesting but unfortunately you need a subscription - we have some issues in school that you can borrow though. Big Picture is free, and you can download and read all the past issues as pdf files [here](#).
- **Free online courses:** There are lots of these, but some require a high level of time commitment or are pitched at more of a university level (e.g. [EdX](#) is incredible, and has courses from the best universities in the world). However there are shorter, less in depth courses out there such as these from the [University of Leeds](#) which are 2 hours a week for 2 weeks. [The Open University](#) also has short, free courses and activities at introductory level, some of which can be completed in less than 10 minutes.
- **Websites:**
 - www.ibiblio.org/virtualcell/index.htm – interactive cell biology site.
 - www.accessexcellence.org/RC/VL/GG – website showing illustrations of processes in biotechnology.
 - <http://www.uq.oz.au/nanoworld> – visit the world of electron microscopy.
 - <http://www.dnai.org/a/index.html> – explore the genetic code.
 - <http://nobelprize.org> – details of the history of the best scientific discoveries
 - <http://nature.com> – the world's best scientific journal
 - <http://royalsociety.org> – podcasts, news and interviews with scientists.
 - <http://www.nhm.ac.uk> – London Natural History Museum's website with lots of interesting educational material.
 - <http://www.bmj.com> – the website of the British Medical Journal.
 - http://www.bbc.co.uk/news/science_and_environment – BBC news page for Science.
 - Read the papers, watch the news, follow up on stories. BBC News has lots of articles which link to further research.



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- **YouTube:** Not exactly reading, but it's another way to access information, and you may well be inspired to do some further research. Here are some popular Youtube channels.
 - [Crash Course](#)
 - [iBiology](#)
 - [Amoeba sisters](#)
 - [Moof University](#)
 - [Osmosis](#)
 - [Khan Academy](#)
 - [MIT OpenCourseWare](#)
 - [Bozeman Science](#)
- **TV:** Again, not exactly reading, but there are lots of relevant programmes about and on catch-up, like Planet Earth, for example.



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Business and Economics

The Economist magazine – the school has a free online subscription

Tim Harford, *The Undercover Economist*

Naomi Klein, *Shock Doctrine*

Naomi Klein, *No Logo*

Naomi Klein, *Fences and Windows*

Noam Chomsky, *Hegemony or Survival*

Will Hutton, *The State We're in*

Chemistry

Oxford chemistry primers is an excellent series - all cost between £10 - £14. They are very thin and approachable, but have some deceptively advanced content!

Shriver & Atkins, *Inorganic Chemistry*

Housecroft & Constable, *Chemistry*

Atkins & de Paula, *Physical Chemistry*

Monk & Monro, *Maths for Chemists*

James Keeler and Peter Wothers, *Why Chemical Reactions Happen*

Computing

A.K.Dewdney, *New Turing Omnibus*

French

Emile Zola, *Germinal*

Charles Baudelaire, *Les Fleurs du Mal*

Andre Breton, *Nadja*



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Geography

Paul Collier, *The Bottom Billion: Why the Poorest Countries are Failing and What Can be done about it*

James Lovelock, *The Revenge of Gaia: Why the Earth is Fighting Back and How We Can Still Save Humanity*

Tim Marshall, *Prisoners of Geography*

www.ted.com

www.withouthotair.com

Health and Social Care

Books:

Pig Heart Boy by Malorie Blackman

Wonder by R.J. Palacio

This is Going to Hurt by Adam Kay

When Breathe becomes Air by Paul Kalanithi

The Hate U Give by Angie Thomas

Me Before you by Jojo Moyes

The Fault in Our Stars by John Green

The Story of Baby P by Ray James

Savage Girls and Wild Boys by Michael Newton

The Language of Kindness by Christie Watson

I am Malala by Malala Yousafzai

The Boy Who Couldn't Stop Washing by Dr Judith Rapaport

Netflix:

Babies

Marriage Story

Louis Theroux: Extreme love, Dementia

Five Feet Apart

Brain on Fire

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Theory of Everything

What to expect when you're expecting

Unbroken

Girl, interrupted

Call the Midwife

13 Reasons Why

Pandemic: How to prevent an outbreak

BBC iPlayer:

Elizabeth is Missing

Rio & Kate: Becoming a Step family

Jesy Nelson: Odd one out

Bohemian Rhapsody

4 On Demand:

Confessions of a Junior Doctor

Born to be different

Secret life of... Year Olds

Still Alice

Amazon Prime:

The Children Act

The Upside

Beautiful Boy

Miss you Already



Extended Learning

History

Unit 1: The Civil War Years 1625-1701

Peter Ackroyd, *Civil War: The History of England Volume III* (History of England Vol III), 2015

Christopher Hill, *The World Turned Upside down: Radical ideas during the English Revolution* (2019)

Leanda de Lisle, *White King: The Tragedy of Charles I* (2019)

Tristram Hunt, *The English Civil War: At First Hand* (2011)

Ian Mortimer, *The Time Traveller's Guide to Restoration Britain* (2018)

Barry Coward, *The Stuart Age*

Edward Vallance, *The Glorious Revolution: 1688 - Britain's Fight for Liberty* (2013)

Jenny Wormald (editor), *The Seventeenth Century* (Short Oxford History of the British Isles, Oxford University Press, 2008)

William G. Naphy, *The Protestant Revolution: From Martin Luther to Martin Luther King Jr.* (2007)

Thomas Hobbes, *Leviathan*

David Starkey, *Crown and Country: The Kings and Queens of England*

Websites

BBC

English Civil War website and also content on the Glorious Revolution

www.bbc.co.uk/history/british/civil_war_revolution/

Documentaries

The Stuarts <https://www.bbc.co.uk/iplayer/episodes/p01lkn5l/the-stuarts>

Channel 4

Monarchy, presented by David Starkey

<https://www.youtube.com/watch?v=fdDKO-Klflo> - Oliver Cromwell - The King Killer

<https://www.youtube.com/watch?v=mypTm0VRF4g> - The Glorious Revolution

Podcasts

BBC Radio 4, *In our Time* podcasts <https://www.bbc.co.uk/programmes/b01rw1k7> - The Putney Debates

<https://www.bbc.co.uk/programmes/b00kpzd6> - The Trial of Charles I

<https://www.bbc.co.uk/programmes/p00547bx> - The Restoration

<https://www.bbc.co.uk/programmes/p00547fk> - The Glorious Revolution



Extended Learning

<https://www.bbc.co.uk/programmes/b01f67y4> - George Fox and the Quakers
<https://www.bbc.co.uk/programmes/p003k911> - Thomas Hobbes
<https://www.bbc.co.uk/programmes/p003hyds> - The Royal Society
<https://www.bbc.co.uk/programmes/p004y28g> - John Locke and Empiricism

Paper 2: Russia in Revolution, 1894–1924

John Reed, *Ten Days That Shook the World*

- A buccaneering east-coast American radical despatched to cover the revolution is hypnotised by it and his reports combined to make a book that had a huge impact in the US and beyond. Decades later, Warren Beatty made it into a movie, *Reds*, in which the most electrifying sections were the appearances by witnesses who had known Reed.

Albert Rhys Williams, *Through the Russian Revolution*

- Williams was already in Petrograd when Reed arrived and acted as a calming tutor to his wilder and more activist colleague. His book is in some ways a more solid work, helped by several conversations with Lenin and other Bolsheviks, as well as their opponents.

Orlando Figes, *A People's Tragedy: The Russian Revolution 1891-1924* (2017)

Robert Service, *The Last of the Tsars: Nicholas II and the Russian Revolution* (2018)

Sean McMeekin, *The Russian Revolution: A New History* (2018)

Sheila Fitzpatrick, *The Russian Revolution* (2017)

Michael Foley, *Russian Civil War: Red Terror, White Terror, 1917-1922* (2018)

Simon Sebag Montefiore, *Young Stalin*

Simon Sebag Montefiore, *Stalin: The Court of the Red Tsar*

Websites

Russian Revolution timeline 1900-1917

<https://www.bl.uk/russian-revolution/articles/timeline-of-the-russian-revolution>

Documentaries

Empire of the Tsars, Romanov Russia with Lucy Worsley, Episode 3 – The Road to Revolution -

<https://www.bbc.co.uk/programmes/b06vmlcg/episodes/guide>

Podcasts

BBC History Hour: The Russian Revolution – The Bolsheviks take Control

<https://www.bbc.co.uk/programmes/w3csvstw>



Extended Learning

History Hub, Podcast: Judith Devlin on the Russian Revolution <http://historyhub.ie/judith-devlin-the-russian-revolution> BBC Radio 4, In our Time, Lenin - <https://www.bbc.co.uk/programmes/p00546pv>

BBC Radio 4, *In our Time*, Tsar Alexander II's assassination <https://www.bbc.co.uk/programmes/p003k9b2>

15 Minute History, Episode 101 - The Bolshevik Revolution at 100
<https://15minutehistory.org/podcast/episode-101-the-bolshevik-revolution-at-100/>

General

Simon Schama, *A History of Great Britain*

George Orwell, *Nineteen Eighty-Four*

Robert Graves, *I Claudius*

John K. Galbraith, *The Great Crash 1929: The classic account of economic disaster*

Michael Burleigh, *Sacred Causes: religion and politics from the European Dictators to Al Qaeda*

Mark Mazower, *Dark Continent: Europe's Twentieth Century*

Niall Ferguson, *War of the World: History's Age of Hatred*

Niall Ferguson, *The Pity of War* (1999)

History today magazine

Podcasts

BBC Radio 4, *In our Time* podcasts <https://www.bbc.co.uk/programmes/b01rw1k7> - The Putney Debates

<https://www.bbc.co.uk/programmes/b00kpzd6> - The Trial of Charles I

<https://www.bbc.co.uk/programmes/p00547bx> - The Restoration

<https://www.bbc.co.uk/programmes/p00547fk> - The Glorious Revolution

<https://www.bbc.co.uk/programmes/b01f67y4> - George Fox and the Quakers

<https://www.bbc.co.uk/programmes/p003k9l1> - Thomas Hobbes

<https://www.bbc.co.uk/programmes/p003hyds> - The Royal Society

<https://www.bbc.co.uk/programmes/p004y28g> - John Locke and Empiricism

Historical Association

Podcasts on Cromwell, including the execution of Charles I and Tudor and Stuart women:

www.history.org.uk/podcasts/#/e/289

You're dead to me

From the makers of *Horrible Histories* but more adult!

History Hit



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Varied and entertaining podcasts from TV historian Dan Snow.

[BBC History Extra](#)

Lots of really interesting different topics are covered here

Historiography

[David Cannadine](#) *What is History Now?*

[E.H. Carr, Professor Richard J. Evans](#) *What is History?*

[Professor Ludmilla Jordanova](#) *History in Practice*

[Alan Bennett](#), *The History Boys* (Book/film)

Law

www.thelawyer.com

[Helena Kennedy](#), *Eve Was Framed: Women and British Justice*

[Helena Kennedy](#), *Just Law*

[Tom Bingham](#), *The Rule of Law*

[Geoffrey Rivlin](#), *Understanding the Law*

[Marcel Berlins and Clare Dyer](#), *The Law Machine*

Law in action **podcast**

Maths

[David Acheson](#), *1089 and all that: A Journey into Mathematics*

[Graham Farmelo \(editor\)](#), *It Must be Beautiful*

[Simon Singh](#), *Fermat's Last Theorem*

[Simon Singh](#), *The Code Book: The Secret History of Codes and Code-breaking*

[Solomon Golomb](#), *Polyominoes*

[Edwin Abbott](#), *Flatland: A Romance Of Many Dimensions*



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Rob Eastaway and John Haigh, *How to Take a Penalty*

Sarah Flannery and David Flannery, *In Code: A Mathematical Adventure*

Ian Stewart, *The Magical Maze*

David Wells, *The Penguin Dictionary of Curious and Interesting Numbers*

Apostolos Doxiadis, *Uncle Petros and Goldbach's Conjecture*

John Conway and Richard Guy, *The Book of Numbers*

William Dunham, *The Mathematical Universe: An Alphabetical Journey Through the Great Proofs, Problems, & Personalities*

Ian Stewart, *Does God Play Dice?*

Timothy Gowers, *Mathematics: A Very Short Introduction*

Michael J de Smith, *Maths for the Mystified*

Eli Maor, *e: The Story of a Number*

Robin Wilson, *Four Colours Suffice*

Keith Devlin, *The Millennium Problems*

Robert Kanigel, *The Man Who Knew Infinity: A Life of the Genius Ramanujan*

Marcus du Sautoy, *The Music of the Primes*

Here is a list of recommended books for Sixth formers from the Mathematical Association <https://www.m-a.org.uk/resources/booklist07.doc>

Online lectures

Hannah Fry presented the Royal Institution Christmas lectures this year on the theme of Secrets and Lies: The hidden power of Maths. There are many other interesting Maths and Science lectures you can watch from previous years <https://www.rigb.org/christmas-lectures/watch>

The BBC 2 Horizon series of programmes also covers a wide range of themes in Science and Maths <https://www.bbc.co.uk/iplayer/episodes/b006mgxf/horizon>



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Media

<https://www.theguardian.com/media/series/media-briefing>

Connell, B., *Exploring the Media – Text, Industry, Audience, Auteur*

Williams, E., *This is Advertising*

Lacey, N., *Media, Institutions and Audiences*

Medicine, Dentistry, Nursing, Midwifery etc.

Mr Christo's Medsoc section of the King David High School website has a wealth of resources:

<http://www.kdhs.org.uk/medsoc.html>

Physics

Feynman Lectures (online): <https://www.feynmanlectures.caltech.edu/>

Hyperphysics: <http://hyperphysics.phy-astr.gsu.edu/hbase/index.html>

IOP: www.iop.org

How Stuff Works: www.howstuffworks.com

NASA: www.nasa.gov

Physics: www.physics.org

Physics World: www.physicsworld.com

CERN: www.home.cern

Physics classroom: <https://www.physicsclassroom.com/>

Data: <https://www.wolframalpha.com/examples/science-and-technology/physics/>

American Physical Society: <https://aps.org/>

Physics forums: <https://www.physicsforums.com/>

Books

Stephen Hawking. *A brief history of time*

John Gribbin. *In search of Shroedinger's cat*

Brian Greene. *The elegant universe*



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Michio Kaku, *Parallel worlds: a journey through creation, higher dimensions and the future of the cosmos*

Leonard Susskin, *The black hole war*

Lisa Randell, *Warped passages: unravelling the mysteries of the universes hidden dimensions*

Richard Feynman, *6 easy pieces*

Richard Feynman, *6 not so easy pieces*

Richard Feynman, *Surely you're joking Mr Feynman*

Psychology

Social Psychology

Zimbardo P. (2008) *The Lucifer Effect: How good people turn evil*

Milgram S. (2010) *Obedience to Authority: An experimental view*

Pelonero C (2016) *Kitty Genovese: A true account of a public murder and its private consequences*

Psychopathology

Malik C (2015) *The Narcissist Test: How to spot outsized egos and the surprising things you learn from them*

Ronson J (2011) *The psychopath test*

Dutton K. and McNab A. (2014) *The good psychopath's guide to success: How to use your inner psychopath to get the most out of life*

Free Will vs Determinism

Mischel W. (2014) *The Marshmallow Test: Understanding self-control and how to master it*

Plomin R. (2018) *Blueprint: How DNA makes us who we are*

The Adjustment Bureau (2011) – can we control against the agents of fate? Film starring Matt Damon



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General

Harari Y. N. (2015) *Sapiens: A brief history of humankind*

Sacks O. *The Man who mistook his Wife for a Hat*

Sociology

Texts

Judith Butler: *Gender Trouble: Feminism and the Subversion of Identity*

Owen Jones: *Chavs: The Demonisation of the Working Class*

Louis Theroux, *The Call of the Weird: Travels in American Subcultures*

Kate Pickett and Richard Wilkinson, *The Spirit Level: Why Equality is Better for Everyone*

Sudhir Venkatesh: *Gang Leader for a Day*

Simone de Beauvoir, *The Second Sex*

Reni Eddo-Lodge: *Why I'm no Longer Talking to White People About Race*

Films and television

Riot Club

Where to Invade Next

Louis Theroux: The Most Hated Family in America etc.

Going Clear: Scientology and The Prison of Belief

Examined Life

Faking it (British Channel 4 TV series)

Websites

www.revisesociology.com

The Teacher Sociology: https://www.youtube.com/channel/UC6VpoZj33Df_rNb8KymCczw

Summaries of classic sociological texts: <https://www.tutor2u.net/sociology/collections/classic-texts-summaries-sociology-students>



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Spanish

Grammar

Butt, John & Carmen Benjamin, *A New Reference Grammar of Modern Spanish*, 4th ed., London: Arnold

Texts

Federico García Lorca, *La casa de Bernarda Alba*

Gabriel García Márquez, *Crónica de una muerte anunciada*

Laura Esquivel, *Como agua para chocolate*

Ramón J. Sender, *Réquiem por un campesino español*

Carlos Ruiz Zafón, *La sombra del viento*

Isabel Allende, *La casa de los espíritus*

Gustavo Adolfo Bécquer, *Rimas*

Fernando Fernán-Gómez, *Las bicicletas son para el verano*

Luis de Castresana, *El otro árbol de Guernica*

Gabriel García Márquez, *El coronel no tiene quien le escriba*

Films

El laberinto del fauno, Guillermo del Toro (2006)

Ocho apellidos vascos, Emilio Martínez-Lázaro (2014)

María, llena eres de gracia Joshua Marston (2004)

Volver, Pedro Almodóvar (2006)

Abel Diego, Luna (2010)

Las 13 rosas, Emilio Martínez-Lázaro (2007)

Oxbridge

<https://myheplus.com/>

This is from the university of Cambridge. There are different subject pages to look at.



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<https://openlibrary.org/>

Lots of free access to different texts.

<https://www.hist.cam.ac.uk/welcome-our-virtual-classroom>

This is the virtual classroom of the History Faculty at Cambridge. Some good sources etc to look at that might help with preparation for aptitude tests.

<https://podcasts.ox.ac.uk/>

Loads of podcasts and lectures from the University of Oxford. Definitely worth searching for your areas of interest.

<https://theconversation.com/uk>

This is discussion of various issues of the day by academics. It's also a good idea to follow any academics you like on twitter.

General

Lots of good advice on revision planning and technique is available here:

www.lifemoreextraordinary.com

...and here:

Tony Buzan, *Use Your Head: How to Unleash the Power of Your Mind* www.intelligencesquared.com

www.tedtalks.com

- *Online talks on a huge range of subjects*

Attend one of the societies: Law Society, Medsoc, Politics Society, Psychology Society etc. or set up your own.