

## Biology Resources for Schools

### Resources for students

Key stage	Resource
	<b>Additional Reading</b>
KS5	<p>From <a href="#">Cambridge University Reading List for Natural Sciences</a>:</p> <p><b>Biology of cells:</b></p> <ul style="list-style-type: none"> <li>▪ How we live and why we die: the secret lives of cells by Lewis Wolpert (Faber and Faber Paperback)</li> <li>▪ Essential Cell Biology by Alberts, et al (2014) 6<sup>th</sup> Edition Garland</li> </ul> <p><b>Evolution and behaviour:</b></p> <ul style="list-style-type: none"> <li>• The Animal Kingdom: A very short introduction by Holland, P., OUP 2011</li> <li>• The Ancestor's Tale: A Pilgrimage to the Dawn of Life by Dawkins, R &amp; Yang, W. Weidenfield &amp; Nicholson (2016)</li> <li>• Endless Forms Most Beautiful by Carroll, S Quercus (2005)</li> </ul>
KS5	<p><b>Popular Science books recommended by Biology Undergraduates:</b></p> <ul style="list-style-type: none"> <li>• Why Evolution is True by Jerry A. Coyne</li> <li>• Bad Science by Ben Goldacre- discusses statistics and the use of evidence in science and the media</li> <li>• The Diversity of Life by E. O. Wilson</li> <li>• Guns, Germs and Steel by Jared Diamond-discusses the effects of Geography and Biology on the success of global civilisations. Chapter 9 should be of particular interest to biologists.</li> </ul>
KS5	<p>Staircase 12 - <a href="#">Reading suggestions and Resources</a> from current undergraduates.</p>
	<b>Websites</b>

KS2-5	<p><a href="#">Explore</a> - explore some of the big questions that are relevant to us all such as:</p> <ul style="list-style-type: none"> <li>• Could we end disease?</li> <li>• Can you choose to be healthy?</li> <li>• Are humans more important than other animals?</li> <li>• Is it OK to clone a human being?</li> </ul>
KS1-5	<a href="#">STEM</a> - a range of separate biology and cross curricular science activities for students of all ages with a specific section on home and family learning.
KS2	Oxford Sparks Science activities for KS2 <a href="#">Just Imagination booklet</a> is designed for parents to carry out activities with their children.
KS2-5	<a href="#">Oxford Sparks Science</a> - podcasts/videos/teaching resources, articles, activities/competitions materials
KSS3-5	<a href="#">Oxford University Natural History Museum virtual tour</a>
KS2-4	<a href="#">Science Kids</a> - experiments and free games.
KS2-3	<a href="#">Teaching Ideas</a> - free science resources for KS2-3
KS2-4	Purpose games - educational games related to specific subjects and topics, e.g. <a href="#">quiz about the heart</a> .
KS3-5	<a href="#">OUP Science resources</a>
KS4/5	<a href="#">JCS online home learning resources</a> - extended free trial for duration of the virus.
KS3-5	<a href="#">Click view</a> - video material for remote learning- charges may apply.
KS3	<a href="#">BBC Bitesize KS3 Biology</a>
KS4	<a href="#">BBC Bitesize GCSE Biology revision</a>
KS4-5	<a href="#">Khan Academy Biology resources</a> , GCSE and A Level.
KS4-5	<a href="#">S-Cool</a> - GCSE and A Level Biology revision.
KS4	<a href="#">Memrise study guide for GCSE Biology AQA</a>
KS4-5	<a href="#">Spark notes online study guides</a>
KS4-5	<a href="#">Phet Simulations</a> - simulations of biology experiments.
KS4-5	<a href="#">Virtual lab experiments website</a>
KS5	<a href="#">Intobiology.org.uk</a> –research, videos, ideas for EPQs and independent investigation
KS3-5	<a href="#">Ask A Biologist</a> - biology activities, puzzles and games.

KS4-5	<a href="#">Things We Don't Know</a> - discover the questions that biologists are trying to answer.
KS2-5	<a href="#">Royal Society of Biology</a> - resources for primary secondary and HE students, competitions and awards for students.
KS1-5	<a href="#">The Biology Zone</a> resources including sound recording and video clips and about different animals and plants.
KS4-5	<a href="#">The New Scientist</a>
KS4-5	Science Museum resources - <a href="#">Genetics</a>
ALL	<a href="#">Your Genome</a> - activities related to genetics.
KS4-5	<a href="#">Health Careers- Medicine</a> - If you're interested in finding out more about working as a doctor in the UK, this NHS website helps offers information about medical degrees and career options
KS5	<a href="#">Xplore Health</a> - This programme offers multimedia resources, giving an insight into the latest biomedical research
ALL	<a href="#">World Wildlife Fund</a> - information, reading suggestions on a range of topics See carbon footprint calculator.
KS4-5	<a href="#">bioNRICH</a> - mathematical puzzles with a biological twist suitable for students aged 14-19.
KS5	<a href="#">Nrich Maths for Cambridge Natural Sciences course.</a>
KS4-5	<a href="#">Oxford Science blog</a>
KS4-5	Oxford Research: <a href="#">Putting ticks on the map</a>
KS5	Oxford Research: <a href="#">Poetry in motion</a> – bio-inspired drone technology.
KS4-5	Oxford Research: <a href="#">Defeating dengue with GM mosquitoes.</a>
KS4-5	Oxford Research: <a href="#">The loneliness of the long distance seabird.</a>
KS4-5	Oxford Research: <a href="#">Balancing conservation and commerce in the world's forests</a>
	<b>Radio/podcasts/videos/MOOCs</b>
KS4-5	BBC Radio 4 <a href="#">In Our Time</a> - interview with scientists/biologists.
KS4-5	<a href="#">Radio 3 Biology programmes.</a>
KS5	<a href="#">All Creatures Great &amp; Small.</a> - An Oxford University Radio Show –interviews with three academics discussing what got them into their current area of research.
ALL	<a href="#">The Naked Scientist</a> radio show, podcasts and more.
KS4-5	<a href="#">Player FM biology podcasts</a>

KS4	<a href="#">Listen Notes GCSE Biology Podcasts.</a>
KS4	<a href="#">Podbean GCSE Biology revision podcasts.</a>
KS5	<a href="#">Listen Notes A Level Biology Podcasts.</a>
KS5	<a href="#">Podbean A Level Biology revision podcasts.</a>
KS5	<a href="#">A-Level Biology podcasts</a>
KS5	<a href="#">Oxford University Biology podcasts</a>
KS4-5	<a href="#">Biology TED Talks</a> - short talks of less than 20 minutes on various biology topics.
KS4-5	<a href="#">iBiology</a> - Biology talks by some of the world's leading scientists
KS4-5	<a href="#">Bill Nye The Science Guy videos.</a>
KS4-5	<a href="#">BBC Biology documentaries.</a>
KS5	<a href="#">Video- Studying Biology at Oxford</a>
KS5	<a href="#">Student Profiles of Biology Undergraduates</a>
KS5	<a href="#">Oxford University Biology Research</a>
KS4-5	Oxford University Research - (video): <a href="#">The Surprising Use of Silk</a>
KS4-5	Oxford University Research (video): <a href="#">Bringing Back the Large Blue Butterfly</a>
KS4-5	Oxford University Research (video): <a href="#">Preserving Endangered Trees: A Chilean Case Study</a>
KS4-5	Oxford University Research (video): <a href="#">Jatropha Curcas in the Global Race for Biofuels</a>
KS4-5	Oxford University Research (video): <a href="#">Peru's Data Collectors</a>
KS4-5	Oxford University Research (video): <a href="#">Researching the Reef: Fish and Coral of the Caribbean</a>
KS5	<a href="#">Free Biology MOOCS.</a>
	<b>Magazines and Journals</b>
KS4-5	<a href="#">Nature</a> : world's leading multidisciplinary science journal.
KS4-5	<a href="#">New Scientist.</a>
KS4-5	<a href="#">National Geographic.</a>
KS5	<a href="#">MIT Technology review Biomedicine</a>
KS5	<a href="#">The British Medical Journal.</a>

KS5	<a href="#">Scientific American - Biology</a>
KS5	<a href="#">Biochemical Society</a>
KS5	<a href="#">Science Daily Biology</a>
KS4-5	<a href="#">Science Magazine - Biology</a>
KS5	<a href="#">ZSL Institute of Zoology - Annual Reports</a>
KS5	<a href="#">The Scientist - Microbiology News and Articles</a>
	<b>Competitions</b>
KS3-5	<p><a href="#">UK Biology competitions:</a></p> <ul style="list-style-type: none"> <li>▪ Biology Olympiad KS5</li> <li>▪ Intermediate Olympiad KS4</li> <li>▪ Biology Challenge KS3</li> </ul>
ALL	<a href="#">Oxford University Academic Competitions</a>
	<b>Events</b>
KS4-5	<a href="#">Royal Society of Biology</a> offers events for secondary schools students
	Museums across the country offer exhibitions and events.

#### Resources for teachers

Resource	Notes
<a href="#">Royal Society of Biology</a>	TalkBiology online forum for teachers, CPD for teachers and technicians, careers advice and resources. - Small membership fee applies.
<a href="#">The Microbiology Society</a>	Resources for teachers all key stages, careers information.
<a href="#">The Royal Society for the Protection of Birds</a>	Resources for teachers, outreach visits, activities, competitions and volunteering.
<a href="#">The Node Biologist</a>	Ideas for experiments and other resources.
<a href="#">TES Teaching Resources for Biology</a>	Lesson plans worksheets and activities for secondary and students.
<a href="#">Oxford Sparks teaching resources for Biology</a>	Lesson plans and resources.

Resource	Notes
<a href="#">The British Science Association</a>	STEM competitions - CREST and Youth Challenge  British Science week  Mass participation projects and more.
<a href="#">The Association of Science Education</a>	Resources for KS2-5 students, best practice teaching guide, outreach events, conferences - Small membership fee applies.