

biology.

A Level Preparation Pack



What is Biology?



<https://www.youtube.com/watch?v=6v8djXa-IPQ>

Online Courses



This is an introductory course on cells:

<https://www.open.edu/openlearn/science-maths-technology/histology-microscopy-anatomy-and-disease/content-section-overview?active-tab=description-tab>

Activities



Sporcle contains lots of Biology related quizzes so you can have fun testing your knowledge.

<https://www.sporcle.com/games/subcategory/biology>

Here are some particularly good ones

<https://www.sporcle.com/games/popestcyril/biology-terms-ii>

<https://www.sporcle.com/games/Sebzy7Quizzes/fun-biology-questions-sure-to-keep-you-active>

<https://www.sporcle.com/games/alinrotundu/without-sporcle-science>

Videos



Eden TV

- You can find out why an elephant has a trunk <https://eden.uktv.co.uk/blog/article/why-do-elephants-have-trunk/> Or why a paper cut is so painful <https://eden.uktv.co.uk/blog/article/why-do-paper-cuts-hurt-so-much/>

New Scientist Live

Each week there are three talks available for free – one talk aimed at school students, one for families and one by a world-leading scientist or author.

- <https://www.youtube.com/newscientist>

Radio



BBC Sounds Radio 4 Frontiers - In the first episode, Geoff Watts visits the Human Microbiome Project in the US where they're studying the genetics of bacteria which live on the human body
<https://www.bbc.co.uk/sounds/play/b011jv8r>

Suggested Reading & Podcasts



Podcasts

- **The Infinite Monkey cage** - Microbes: Secret Rulers of the World <https://www.bbc.co.uk/programmes/m0001xqb>
- **Coral Reefs** <https://www.bbc.co.uk/sounds/play/m000dpl2>
- **The Life Scientific** - Jonathan Ball on his arms race against viruses: <https://www.bbc.co.uk/sounds/play/m00074h0>
- **In Our Time - Rosalind Franklyn** – discussion of the pioneering scientist and her work on viruses and DNA <https://www.bbc.co.uk/sounds/play/b09rzm9y>
- **The Cell** – the fundamental building blocks of life <https://www.bbc.co.uk/sounds/play/b01mk8vh>

Suggested reading

- **The Wellcome Trust** has loads of resources for A Level students: <https://www.stem.org.uk/big-picture/resource-collection>
- **Yourgenome** has lots of information and animations on DNA and its manipulation: <https://www.yourgenome.org/topic/in-the-cell>
- **Genome: The Autobiography of a Species in 23 Chapters** (Matt Ridley): https://www.amazon.co.uk/Genome-Autobiography-Species-23-Chapters-ebook/dp/B06Y6248H5/ref=sr_1_6?dchild=1&keyword=s+matt+ridley&qid=1589354211&s=digital-text&sr=1-6

TV & Film

Code of a Killer - The story of Sir Alec Jeffreys, the inventor of DNA fingerprinting. Be warned though, it involves a horrible murder story which Alex Jeffreys was determined to solve. 2 episodes on YouTube:

- <https://www.youtube.com/watch?v=L3AEsrixGAo&feature=youtu.be>

TED talks - A collection of TED Talks on the topic of Biology:

- <https://www.ted.com/topics/biology>

Planet Earth – Sir David Attenborough (BBC iPlayer):

- <https://www.bbc.co.uk/programmes/b006mywy>

Our Planet – Sir David Attenborough (Netflix):

- <https://www.netflix.com/gb/title/80049832>

Course Specifications

A Level - [Download OCR Biology Specification](#)