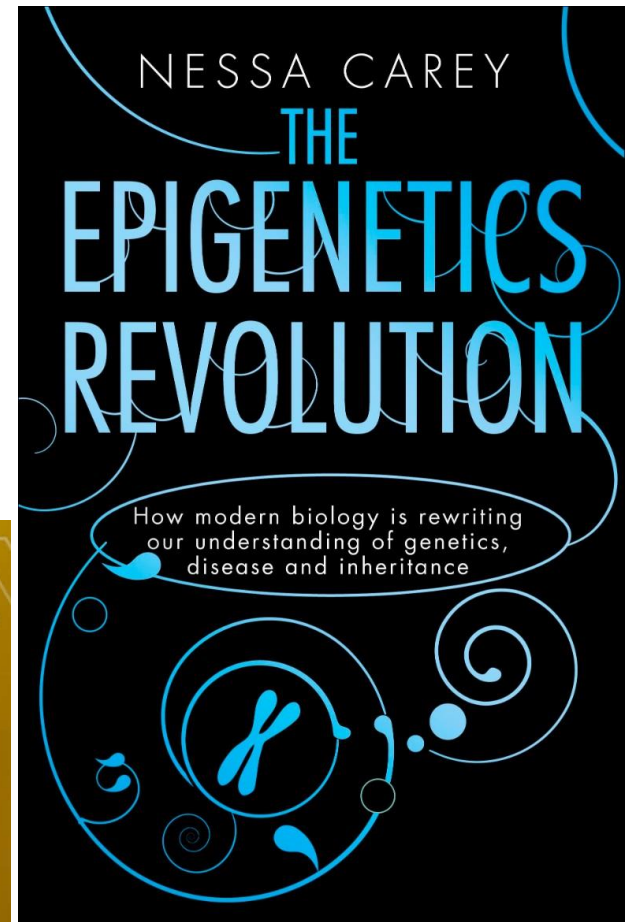




Reading around the subject...

Biology



Why?

A*

- By reading around the subject of Biology, you will enhance your learning experience.
- A number of the ideas listed throughout this power point go further than the specification, therefore stretching your understanding and enabling you to learn about new advances in biological research
- This will help you for paper 3 where you will complete a 25 mark essay question.
- By incorporating information beyond the specification into your answer, you can access the higher mark band
- It's also great to talk about on interview at University if wanting to study a Science based degree!

Popular Science Reading Books

- These include books that focus on the advances in studying the genome and epigenetics....a fascinating topic which is covered in Y13

Take your pick!

- ***The Incredible Unlikeliness of Being***. Alice Roberts. Alice Roberts combines embryology, genetics, anatomy, evolution and zoology to tell the incredible story of the human body.
- ***The Epigenetics Revolution***. Nessa Carey. A fascinating introduction to epigenetics. If you enjoy this, follow up with *Seed to Seed* (see below).
- ***The Immortal Life of Henrietta Lacks***. Rebecca Skloot. How one woman's cancer cells changed the medical world forever, and became a multi-million dollar industry.
- ***Bad Science***. Ben Goldacre. An objective look at popular science reporting.
- ***The Botany of Desire***. Michael Pollan. A very different approach to science writing. Michael Pollan turns our normal perspective on its head to consider how plants manipulate humans.
- ***A crack in creation: Gene editing and the unthinkable power to control evolution***. Jennifer Doudna and Samuel Sternberg. Describes the development of CRISPR - a gene editing tool that has revolutionised treatments for inherited diseases and considers the ethics of this approach.

Popular Science Reading Books

- ***Primates: the fearless science of Jane Goodall, Diane Fossey and Binté Galdikas.***
The story of 3 scientists and their work with Primates.
- ***Blood Work: A Tale of Medicine and Murder in the Scientific Revolution.*** Holly Tucker.
The dramatic history of blood transfusions, from 17th century France onwards.
- ***Seed to Seed.*** Nicholas Harberd. A research scientist tells the story of ten years of discovery in his own laboratory. A very valuable insight into contemporary genetics and epigenetics research, and what it means to be a scientist.
- ***Calculus Diaries.*** Jennifer Ouellette. A non-mathematician finds out how maths can help you tackle anything – even a zombie apocalypse!
- ***Life Ascending.*** Nick Lane. Where does DNA come from? How did the eye evolve? A reconstruction of evolutionary history through ten of its greatest landmarks.
- ***Genome.*** Matt Ridley. 23 human chromosomes in 23 chapters.
- ***The Energy of Life.*** Guy Brown. Introduction to the cutting-edge science of Bioenergetics
- ***Invincible Microbe: Tuberculosis & The Never Ending Search For a Cure.*** Jim Murphy & Alison Blank

Magazines

- **Biological Sciences Review.** This magazine is written specifically for students of A level Biology, Scottish Higher Biology and first year Biological Sciences undergraduates. It is highly readable and bridges the gap between your text books and scientific journals. There is a charge for subscribing to the magazine. An archive of articles from previous issues can be found on the [magazine's website](#).
- **The school library has copies of Biological Sciences for you to borrow, there are some great articles, really aimed at your level.**
- **Big Picture.** This is a free magazine produced by the Wellcome Trust. It is written for post 16 Biology students and explores the innovations and implications of cutting edge biomedical science. [Visit the website](#) to access previous issues.
- **A free magazine, certainly worth signing up for**
- **New Scientist** This is a weekly science magazine that keeps you up to date with what's new in science. If you wish to become a subscriber, you will have to pay. <http://www.newscientist.com/>
- **The school library has copies of New Scientist for you to borrow. The magazine covers all science specialisms**
- **Nature.** This is an international weekly journal of science. <http://www.nature.com/>

Web Resources



- **Cells Alive.** Animations, images and interactives about cell biology. <http://www.cellsalive.com>
- **DNA Interactive.** Video footage and animations that bring our understanding of DNA replication and expression to life. <http://www.dnai.org/>
- **Learn.Genetics.** Animations and interactives that bring genetics, bioscience and health to life. <http://learn.genetics.utah.edu/>
- Khan Academy. <https://www.khanacademy.org/>
- **BBC Science and Environment news.** Keep up to date with science and environment news as it happens. http://www.bbc.co.uk/news/science_and_environment or via the BBC News phone App.
- **BBC Health news.** This provides breaking news from the world of human health and can also be found on the BBC News App. <http://www.bbc.co.uk/news/health>

Blogs & Talks



- **IntoBiology videos**
- See our own collection of videos about [the latest research in biology](#)
- **TED talks**
- The best ideas from the TED conferences.
- <https://www.ted.com/topics/biology>
- **AoB Blog**
- If you want to try your hand at reading 'papers' (research articles) from a leading scientific journal, the AoB blog is an excellent place to start. The editorial team highlight selected papers from each issue and write a short blog post introducing the paper and giving it some context. This will really help you as you begin reading the paper. They even make many of the papers free, including all articles over 12 months old.
- <http://aobblog.com/>
- **Naked Scientists**
- Audience interactive radio talk show brought to you by a team of scientists, doctors and communicators.
- <http://www.thenakedscientists.com/>
- **Nobel Prize.org**
- Games and simulations based on Nobel prize- winning achievements.
- <http://www.nobelprize.org/educational/>

- **Netflix (if you have it)**
- Food, Inc - nominated for an Oscar- about meat industry explained.
- Explained – 15 minute programmes answering questions from gene editing, animal intelligence and how we judge beauty
- Chasing coral - the affect of climate change on coral reefs.

Record your extra reading!

- You will have a lot of time over the summer to relax and read.
- We recommend you pick 3 of the reading books listed and explore the world of Biology through the work of scientists that have made a difference in their field.
- Also, do explore the magazines, online resources and talks from leading scientists and get an insight of the scientific world around you.
- Keep a log of your reading and browsing. Tell us about it when you return in September.
- How did reading these materials change your perception of Biology? What was the most impactful read?

