

St. Anne's Sixth Form Get Ahead Tasks





Congratulations on choosing the most interesting and challenging A Level course to study!

TASK: You will create a 5-10 minute presentation to share with your new class on an area of biology that either interests you or relates to a career you would like to pursue.

Be ready to present in the first week at school. Your audience will review the presentation so make sure it is engaging and interactive. Your presentation must include a summary of your experience, why you chose this resource and how this has impacted you.

Online:

- 1. Live talks with Natural History Museum scientists via Youtube
- 2. Medicine lectures from Gresham College
- 3. TED Talk: Anthony Atala: Growing new organs
- 4. TED Talk: Battling bad science
- 5. TED Talk: Why bees are disappearing?
- 6. TED Talk: A New Superweapon? The fight against cancer
- 7. TED Talk: How to make crops survive without water
- 8. Biological Molecules You Are What You Eat: Crash Course Biology #3

In person events:

- Natural History Museum: Women in science guided tours or any exhibition which is biology based
- Hunterian museum: The development of medicine
- Francis Crick institute: Hello brain
- The science Museum Medicine, the welcome the galleries
- Grant Museum of Zoology <u>https://www.ucl.ac.uk/culture/grant-museum-zoology</u>

Subject Leader: Mr R Thompson

Exam Board: AQA



St. Anne's Sixth Form Get Ahead Tasks





Research Tasks:

- 1. How have the following scientists helped to further our understanding of cell structure: Robert Hooke, Anton van Leeuwenhoek, Theodor Schwann and Ernst Ruska?
- 2.DNA: From its discovery to its modern day applications: <u>https://www.dnaftb.org/</u>

Reading list:

1) A Short History of Nearly Everything, Bill Bryson

A whistle-stop tour through many aspects of history from the Big Bang to now. This is a really accessible read that will re-familiarise you with common concepts and introduce you to some of the more colourful characters from the history of science! Available at amazon.co.uk.

2) Junk DNA, Nessa Carey

Our DNA is so much more complex than you probably realize, this book will really deepen your understanding of all the work you will do on Genetics. Available at amazon.co.uk.

3) Frankenstein's cat, Emily Anthes

An easy read. Discover how glow in the dark fish are made and more great Biotechnology breakthroughs. Available at amazon.co.uk.

Subject Leader: Mr R Thompson

Exam Board: AQA