

More able learners in biology may display a selection of the following characteristics:

- Aware of how the context influences the interpretation of science content
- Recognise patterns and relationships in science data
- Can hypothesise/predict based on valid evidence and draw conclusions
- Decide quickly how to investigate fairly and manipulate variables
- Enjoy researching obscure facts and applying scientific theories, ideas and models when explaining a range of phenomena
- Recognise and process reliable, valid and accurate data; can explain why data is unreliable, invalid or inaccurate
- Inquisitive about how things work and why things happen
- Good observational skills
- Enjoy talking with the teacher about new information or ideas
- Think flexibly, generalise ideas and adapt problem-solving approaches
- Ask many questions
- Enjoy logical reasoning
- May be able to miss out steps when reasoning
- Strive for maximum accuracy in measurements of all sorts
- Use advanced and extensive vocabulary, including the use of appropriate language from other areas of the curriculum such as mathematics
- Put forward objective arguments, using combinations of evidence and creative ideas, and question other people's conclusions
- Extremely interested in finding out more about things around them
- Read widely on science or science fiction
- Have scientific hobbies and/or members of scientific clubs and societies

Podcasts:



Why Bees are Disappearing

Available at :
http://www.ted.com/talks/maria_spivak_why_bees_are_disappearing?language=en
 Honeybees have thrived for 50 million years, each colony 40 to 50,000 individuals coordinated in amazing harmony. So why, seven years ago, did colonies start dying en-masse?

Why Doctors Don't Know About the Drugs They Prescribe

Available at :
http://www.ted.com/talks/ben_goldacre_what_doctors_don_t_know_about_the_drugs_they_prescribe?language=en

When a new drug gets tested, the results of the trials should be published for the rest of the medical world — except much of the time, negative or inconclusive findings go unreported, leaving doctors and researchers in the dark.



Growing New Organs

Available at :
http://www.ted.com/talks/anthony_atalla_growing_organs_engineering_tissue?language=en
 Anthony Atalla's state-of-the-art lab grows human organs — from muscles to blood vessels to bladders, and more.

Reading List:

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| This is Going to Hurt Gulp | Adam Kay Mary Roach |
| Contented Dementia | Oliver James |
| Humankind | Timothy Morton |
| Creation – The origin of Life | Adam Rutherford |
| The Language of the genes | Steve Jones |
| Elephant on the Edge | G A Bradshaw |
| To be a Machine | Mark O'Connell |
| Selfish Gene | Richard Dawkins |
| The Immortal Life of Henrietta Lacks | Rebecca Skloot |
| Interiors of the Earth | Chris D Thomas |
| The Incredible Unlikelihood of Being Tamed | Alice Roberts |
| Nature via Nurture | Alice Roberts |
| The Case Against Sugar | Matt Ridley |
| Why We Sleep | Gary Taubes Matthew Walker |

Enrichment opportunities:

- Bioethic Society.
- The Allotment Team
- Biology Challenge competition (RSB)
- Medic workshop at Kings College, London
- Visit to School of Medicine, Anglia Ruskin

Websites:

<https://www.rsb.org.uk>

<https://learn.genetics.utah.edu/>

<https://www.s-cool.co.uk/a-level/biology>

<http://www.biologymad.com/>

Apps:



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