

Firstly, make sure that you are completely confident with all the biology GCSE content. You will be building on this knowledge at A-level, so it is essential to have a secure foundation. If you are confident, please move onto the following

Independent Scholarship Award: A Level Biology		
Bronze	Silver	Gold
<ul style="list-style-type: none"> <li>Evidence of notes (preferably using the Cornell Notes System – please look this up) taken from <b>one</b> magazine article, talk or book related to biology (see below for some examples).</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of notes (preferably using the Cornell Notes System – please look this up) taken from <b>a range of</b> magazine articles, talks or books related to biology (see below for some examples).</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of notes (preferably using the Cornell Notes System – please look this up) taken from <b>a range of</b> magazine articles, talks or books related to biology (see below for some examples).</li> <li>Write a 500-word essay on <b>one</b> of the following questions:               <ul style="list-style-type: none"> <li>(a) Discuss what can currently be achieved through genetic engineering and how it might improve during your lifetime.</li> <li>(b) As genetic engineering becomes a more useable technology, discuss what decisions society and governments will have to make in the future, in regards to how to use it appropriately.</li> </ul> </li> </ul> <p>Email your completed essay to <a href="mailto:jwilliams@rmgs.org.uk">jwilliams@rmgs.org.uk</a></p>

Some examples of resources you could use for your independent learning are below. These are just suggestions, we encourage you to choose resources on any biology-related topics that interest you.

## Magazines

- New Scientist – this famous magazine reports on cutting-edge scientific research.
- The Big Picture – this is an excellent publication by the Wellcome trust. All issues can be accessed online free as a pdf. Topics include The Cell (<http://bigpictureeducation.com/cell>), The Immune System (<http://bigpictureeducation.com/immune>) and Populations (<http://bigpictureeducation.com/populations>)
- The Biologist (<https://thebiologist.rsb.org.uk/biologist>)

## Talks

- *A new superweapon in the fight against cancer*, by Paula Hammond (<https://www.youtube.com/watch?v=1N39Z00DeME>)
- *Why bees are disappearing*, by Marla Spivak (<https://www.youtube.com/watch?v=dY7iATJVCso>)
- *Why doctors don't know about the drugs they prescribe*, by Ben Goldacre (<https://www.youtube.com/watch?v=RKmxL8VYy0M>)
- *Growing new organs*, by Anthony Atala (<https://www.youtube.com/watch?v=7SfRgg9botl>)

## Books

- *The selfish gene*, by Richard Dawkins
- *Creation: the origin of life/ the future of life*, by Adam Rutherford
- *A brief history of everyone who has ever lived*, by Adam Rutherford
- *The smallpox slayer*, by Alan Brown
- *Mutants: on the form, variety and errors of the human body*, by Armand Marie Leroi
- *Sapiens: A history of humankind*, by Yuval Noah Harari
- *The body*, by Bill Bryson
- *The vital question – why is life the way it is?*, by Nick Lane