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			
Evidence of notes taken from one magazine article, talk, book etc. (preferably using the Cornell Notes System – please look this up)	<ul> <li>Evidence of notes taken from a range of magazine articles, talks etc. (preferably using the Cornell Notes System – please look this up)</li> <li>Complete the GCSE to A level transition worksheet.</li> <li>Read and make nots on "the language of measurement" document.</li> </ul>	<ul> <li>Evidence of notes taken from a range of magazine articles, talks etc. (preferably using the Cornell Notes System – please look this up)</li> <li>Complete the GCSE to A level transition worksheet.</li> <li>Read and make notes on "the language of measurement" document.</li> <li>Write a 500-600 word essay on one of the following questions:         <ul> <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> <li>Email your completed essay to jwilliams@rmgs.org.uk</li> </ul> </li> </ul>			

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 (<a href="http://bigpictureeducation.com/cell">http://bigpictureeducation.com/cell</a>), The Immune System (<a href="http://bigpictureeducation.com/immune">http://bigpictureeducation.com/immune</a>) and Populations (<a href="http://bigpictureeducation.com/populations">http://bigpictureeducation.com/populations</a>)
- The Biologist (<a href="https://thebiologist.rsb.org.uk/biologist">https://thebiologist.rsb.org.uk/biologist</a>)

## Talks

- A new superweapon in the fight against cancer, by Paula Hammond (<a href="https://www.youtube.com/watch?v=1N39Z0ODeME">https://www.youtube.com/watch?v=1N39Z0ODeME</a>)
- 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=7SfRgg9bot!)

## **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