

Preparing for A Level Biology

The resources below are intended as ideas for you to become familiar with the study of Biology. It is recommended that you complete all of the 'Read' activities, complete at least half of the 'Watch' activities and a few of the 'Listen' activities. The 'Complete the Course' activities are to stretch your understanding and give you a taste of university study.

Read

1. Read the article and answer in under 150 words: How we can alter genes to fight diabetes. <https://www.sciencenewsforstudents.org/article/gene-editing-body-fat-brown-fat-diabetes>
2. Read the article and answer in under 150 words: How gene therapy can restore sight. <https://www.sciencenews.org/article/blindness-retinitis-pigmentosa-gene-therapy-vision-optogenetics>
3. Read the article and describe it in under 150 words. <https://www.sciencenews.org/article/ancient-coronavirus-epidemic-east-asia-dna-covid>
4. Summarise the key scientific discoveries from 2022. <https://www.xcode.life/research/scientific-breakthroughs-2022/>

Watch

1. Watch the video. Describe the immune systems and how it prevents infections by various pathogens. <https://www.youtube.com/watch?v=zQGOcOUBi6s>
2. Watch the video. Write an argument no longer than 200 words either for, or against, halting the ageing process. <https://www.youtube.com/watch?v=GoJsr4lwCm4>
3. Watch the video. Summarise the video on Evolution in under 200 words. <https://www.youtube.com/watch?v=hOfRNOKihOU>
4. Watch the video. Dracunculiasis: what is it and why is it so gross? In less than 200 words. <https://www.youtube.com/watch?v=qNWWrDBRBqk>

Listen

1. Watch this video. Write a paragraph of your opinion of genetically engineered organisms and back it up with science. <https://www.youtube.com/watch?v=7TmcXYp8xu4>
2. Watch this video. 'Whales can help eradicate cancer' – do you agree with this statement? Why? <https://www.youtube.com/watch?v=1AEIONvi9WQ>
3. Watch these videos. Explain the pros and cons of eating meat. <https://www.youtube.com/watch?v=ouAccsTzIGU>
<https://www.youtube.com/watch?v=NxvQPzrg2Wg>
4. Watch this documentary. Choose one point from the programme to write a page summary of how awesome Octopuses are. https://www.youtube.com/watch?v=mFP_AjJeP-M

Complete the Course

1. The History of Mankind – summarise in under 250 words. https://www.youtube.com/watch?v=dGiQaabX3_o
2. In under 250 words, use Biology to explain why plastics are such a danger to the world. <https://www.youtube.com/watch?v=RS7IzU2VJIQ>