

Year 11

Resources to help you prepare for Biology A Level



 <p>Complete this course in which you will learn the physical processes behind climate variation around the world to better understand the causes of climate change.</p> <p>Causes of Climate Change <i>University of Bergen and Bjerknes Centre for Climate Research</i></p>	 <p>Listen to an interview/podcast describing how cloning and stem cells can be used.</p> <p>Stem cells and cloning Naked scientists</p>	 <p>Read this article in which evolutionary biologist Barbara Natterson-Horowitz and writer Kathryn Bowers make the case for why parents — animal <i>and</i> human — should remain involved in the lives of their full-grown offspring.</p> <p>Humans aren't the only ones that help out their adult kids <i>Ideas TED</i></p>	 <p>Watch this TED talk in which neuroscientist Robert Sapolsky asks the question: How can humans be so compassionate and altruistic -- and also so brutal and violent?</p> <p>The biology of our best and worst selves <i>TED Talks – Robert Sapolsky</i></p>	 <p>Complete this course, which aims to demystify the ageing process, and learn how our everyday behaviours are likely to affect our long-term musculoskeletal health.</p> <p>The science of staying active in old age <i>The Universities of Leeds, Sheffield and Newcastle</i></p>
 <p>Listen to the Guardian Science weekly podcast. Especially interesting covering immunity and COVID-19.</p> <p>Immunity and COVID-19 Guardian Science weekly</p>	 <p>Read this article from a clinical psychologist which provides practical ways to overcome whatever life throws your way.</p> <p>8 tips to help you become more resilient <i>Ideas TED</i></p>	 <p>Listen to this radio programme about how our genes actually work</p> <p>How do our genes work? Guardian</p>	 <p>Complete this course on the the role of gene technology in our understanding of human behaviour and biotechnology.</p> <p>Genes and the human condition <i>University of Maryland</i></p>	 <p>Watch this TED talk about how our consciousness is a hallucination!</p> <p>Your brain hallucinates your conscious reality TED talk</p>
 <p>Complete this course which is an entertaining and illuminating exploration into the impact dentistry has on our lives.</p> <p>Discover Dentistry <i>The University of Sheffield</i> Available now or 15th June 2020</p>	 <p>Watch this TED talk on Bill Gates discussing potential problems caused by a pandemic in 2015</p> <p>The next outbreak? <i>TED talk</i></p>	 <p>Read this article from marine scientist Roger Hanlon. In it he explores how the heck colour-blind cephalopods — octopus, squid and others — achieve such a good colour match when they camouflage (in short: amazing, distributed brains).</p> <p>Oddballs with high-level intelligence:</p>	 <p>Listen to this radio programme which explores all sorts of science-related topics (including the Coronavirus).</p> <p>BBC Inside Science <i>BBC Sounds</i></p>	 <p>Watch this TED talk which examines the pharmaceutical industry and its impact on doctors and the wider medical world.</p> <p>What doctors don't know about the drugs they prescribe <i>TED Talk – Ben Goldacre</i></p>

Year 11 – 12 Biology Transition work

The Biology transition work will move through 3 planned phases:

1. GCSE Paper 2 and wrap up of Year 11 material
2. Extension tasks including MOOCs and material from the PiXL progression paper
3. Edexcel Biology transition material in preparation for Bridging assessment in September

Phase 1 – Year 11 wrap up

Plan is to allow students to complete previously planned Paper 2 mock, making it clear that no data can be used in consideration of their GCSE grade. This will give them the opportunity to complete their GCSE course material and give us some data so begin thinking about tracking and possible intervention over the break.

Phase 2 – Wider knowledge & greater depth

Use of a range of MOOCs and activities from the PiXL Progression paper. Examples are:

- [Causes of Climate Change](#) *University of Bergen and Bjerknes Centre for Climate Research*
- [8 tips to help you become more resilient](#) *Ideas TED*
- [Humans aren't the only ones that help out their adult kids](#) *Ideas TED*
- [The biology of our best and worst selves](#) *TED Talks – Robert Sapolsky*
- [The science of staying active in old age](#) *The Universities of Leeds, Sheffield and Newcastle*
- [Oddballs with high-level intelligence: a Q & A with Roger Hanlon about the amazing octopus](#)

Phase 3 – Edexcel transition material

Linked with sixth form induction, material will begin giving students a foundation knowledge of topics 1 & 2. This will also allow students to begin learning some of the tricky subject specific vocabulary used at A-Level Biology.