

Biology Induction Task Summer 2021

Activity 1: Reading Scientific Articles

Read the article provided: 'Bacterial Resistance Wars' from 2012. It explains one of the greatest challenges facing the medical world – the issue of Antibiotic Resistance. Once you have finished, you need to **research antibiotic resistance further for yourselves.**

Write a 400-500 word discussion regarding the problems of Antibiotic Resistance and how we can overcome them.

You should include;

- How antibiotic resistance occurs
- evidence from 'superbugs'
- how we can reduce antibiotic resistance
- what the future would look like if we run out of antibiotics.
- ALSO include relevant referencing to the sources you have used – you should try and find another 2 sources for yourselves from online books/ journals/ articles. Use the Library on Firefly or ask if unsure

This work can be typed or hand written. Please bring it in for the first Biology lesson in September.

Other interesting links;

<https://www.youtube.com/watch?v=pIVk4NVIUh8> Harvard University Medical School 'Megaplate' experiment

<https://www.nature.com/articles/509S2a> Nature Article with useful infographics for antibiotic resistance

<https://www.youtube.com/watch?v=znnp-lvj2ek> 'What Causes Antibiotic Resistance?' TED Talk

https://www.youtube.com/watch?v=uVUf_pt7Sh0 Amoeba Sisters talk antibiotics

<https://www.youtube.com/watch?v=o3oDpCb7VqI> 'What do we do when antibiotics don't work anymore?' TED Talk

Activity 2: AQA Transition Booklet

Read and complete the AQA Transition Booklet.

Activity 3: Answer the questions on the CGP refresh booklet

Bring these in for marking 1st week

Other things to do to be prepared:

- 1) Bring in all the Activities in your first week for marking
- 2) Purchase the required text book. If you require financial support then please speak to your Biology teacher in the first week. It is this one: https://www.amazon.co.uk/Biology-Level-100-Student-Book/dp/0198751750/refed_pos_14_1_0728.0242480_2107750?_encoding=UTF8&pf_rd_p=10108151263&pf_rd_r=cf56d814d-ed9-fd8b-959b-7e07a1208038&pf_rd_w=55f8&pf_rd_wq=FromM&pf_rd_p=316551611711448699&psc=1
- 3) Download a copy of the specification from here: <https://filestore.aqa.org.uk/resources/biology/specifications/AQA-7401-7402-SP-2015.PDF> and have a quick read of the information
- 4) Visit our website to see other activities, videos to watch, links to articles etc. <https://swanshurst.fireflycloud.net/science/ks5/biology/enrichment>