



## SUPER-CURRICULAR ACTIVITIES

### Pre-GCSE: Science - Biology Year 9

 Secure your mathematical skills by going through the worked examples on pages 320-325 in the online Biology book. (Kerboodle)	 Compare and contrast prokaryote and eukaryote cells. Draw images of each. Follow <b>Link 1</b> (below)	 Create a poster comparing diffusion, osmosis, and active transport. Use your Kerboodle textbook and BBC Bitesize for additional information. Follow <b>Link 2</b> (below)
 Working Scientifically Terminology – Consolidate knowledge of key terminology using pages 337–343 on the online Biology book. (Kerboodle)	 Watch this clip on how to revise for sciences. You can also explore more science on this site that we use often at GCSE for revision and teaching. Follow <b>Link 3</b> (below)	 Research the sources of stem cells and potential medical applications. Evaluate their uses and ethical considerations.
 Explore the heart using an interactive 3D model. Follow <b>Link 4</b> (below)	 Watch the TED ED science clip on how the digestive system works and how can you link it to the nutrition foundation work you may have done.	 It is the 20 <sup>th</sup> anniversary of the human genome project. Find out all about it with this podcast. Follow <b>Link 5</b> (below)
 Recap the key components of a healthy diet with the British Nutrition Foundation. Follow <b>Link 6</b> (below)	 Trace the pathway of pathway of various food molecules (carbohydrates, lipids, and fats) through the digestive system.	 Secure your graphing skills by going through the information and answer the questions on pages 333-334 on the online Biology book. (Kerboodle)
 Listen to Sir David Attenborough, capturing the adaptations of plant life to extreme cold temperatures. Follow <b>Link 7</b> (below)	 Write your own article on the importance of stem cells in research for the future. Imagine it could be submitted to the school magazine.	 Learn more about how to use a microscope by using a virtual microscope. Follow <b>Link 8</b> (below)

#### Links to websites used in this Super-Curricular Pre-GCSE Activities sheet:

Link 1: [https://www.newpathonline.com/free-curriculum-resources/virtual\\_lab/Comparing\\_Plant\\_and\\_Animal\\_Cells/8/8,9,10,11,12,13,14/1868](https://www.newpathonline.com/free-curriculum-resources/virtual_lab/Comparing_Plant_and_Animal_Cells/8/8,9,10,11,12,13,14/1868)

Link 2: <https://www.bbc.co.uk/bitesize/guides/z9myxfr/revision/9>

Link 3: <https://www.youtube.com/watch?v=X1Q3J3g6X2w>

Link 4: <https://www.medicalnewstoday.com/articles/320565>

Link 5: <https://www.youtube.com/watch?v=qfgzHAROfWA>

Link 6: <https://www.nutrition.org.uk/healthyliving/healthydiet/healthybalanceddiet.html>

Link 7: <https://www.bbc.co.uk/bitesize/clips/zxphfg8>

Link 8: <https://www.ncbionetwork.org/iet/microscope/>

	Reading task		Creative task		Watching task		Student-led task
	Research task		Writing task		Listening task		Trip or visit