Summer Term – Remotely Learning Plan

<u>Year 9 – Biology (Combined Science)</u>

Week:	Instructions to Parents/Students
28B – 20 th April	Learning about cell structure. This week you need to learn the parts and functions of cell organelles. Make sure you can identify the structures for diagrams, it may help to draw the cells and label them. https://www.bbc.co.uk/bitesize/guides/z9hyvcw/revision/3 has info to help you. Write out the table of functions, then cut it up, mix it up and arrange into the correct order. Complete quiz at https://www.thenational.academy/year-9/science/eukaryotes-and-prokaryotes-year-9-wk1-1/#
29A – 27 th May	Microscopes – learn the difference between light and electron microscopes <u>https://www.bbc.co.uk/bitesize/guides/z9hyvcw/revision/2</u> How can you calculate magnification? Write out the equation and rearrange it using the triangle method. <u>https://www.bbc.co.uk/bitesize/guides/z3vypbk/</u> <u>revision/3</u> Try the quiz at <u>https://www.thenational.academy/year-9/science/microscopes-year-9-wk1-3/#</u> if you don't get full marks try the lesson activity.
30B – 4 th May	Specialised cells – learn about different types of cells and how they are adapted to their function. Make notes on the different types, watch the video clip and try the practise activity at https://www.bbc.co.uk/bitesize/topics/znyycdm/articles/zfj3rwx Have a go at the quiz https://www.bbc.co.uk/bitesize/topics/znyycdm/articles/zfj3rwx Have a go at the quiz https://www.thenational.academy/ year-9/science/specialised-cells-year-9-wk1-2/# to make sure you have a good understanding.
31A – 11 th May	Unicellular organisms – learn about different types of unicellular organisms / primitive cells – <u>https://www.bbc.co.uk/bitesize/guides/z9hyvcw/revision/5</u> then complete quiz at https://www.bbc.co.uk/bitesize/guides/z9hyvcw/test David Attenborough First life <u>https://www.youtube.com/watch?v=3enM7iGflsc</u> is really interesting if you fancy something to watch, fits well with unicellular organisms.
32B – 18 th May	Cell division (mitosis) Learn about why cell division is important and the stages involved in cell division. Produce a poster to show the stages of cell division, annotate your diagram to explain what happen to the chromosomes within the nucleus at each stage. <u>https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/2</u> and <u>https://www.youtube.com/watch?v=dQDwILJe_zU</u>
33A – 1 st June	Stem cells – Find out what a stem cell is. Watch <u>https://www.youtube.com/watch?v=cEB8656TCIE</u> Make notes on embryonic and bone marrow stem cells. Which is the most useful and why? Answer this exam question 'Evaluate the use of embryonic stem cells ' 6 marks – so you could discuss the advantages and disadvantages and then finish with a summary sentence.
34B – 8 th June	Cancer – Learn why cancer occurs and the difference between benign and malignant tumours. Watch <u>https://www.youtube.com/watch?v=lpAa4TWjHQ4</u> and find out about types of tumours at <u>https://www.bbc.co.uk/bitesize/guides/z9dhjty/revision/2</u> make notes on the main differences.
35A – 15 th June	Aerobic respiration – what is aerobic respiration? Learn the equation at https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/2 and watch the video. When we exercise the rate of aerobic respiration increase, explain what changes occur in the body to allow this to happen (4 marks)
36B – 22 nd June	Anaerobic respiration – what is anaerobic respiration? When does it occur in humans? Find out and learn the equation at https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/2 and https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/2 Name 3 uses of anaerobic respiration and complete this quiz https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/3 Name 3 uses of anaerobic respiration and complete this quiz https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/3 Name 3 uses of anaerobic respiration and complete this quiz https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/3 Name 3 uses of anaerobic respiration and complete this quiz https://www.bbc.co.uk/bitesize/guides/zp4mk2p/revision/3
37A – 29 th June	Cell transport -Diffusion - Complete the lesson on diffusion at https://www.bbc.co.uk/bitesize/articles/zbvdwty make notes on factors that will affect the rate of diffusion. Cell transport – Osmosis - Draw a diagram to explain how osmosis occurs and complete the quiz at https://www.bbc.co.uk/bitesize/articles/zbvdwty make notes on factors that will affect the rate of diffusion.
38B – 6 th July	

Cell transport – Active transport. What is active transport? When does it occur find out at <u>https://www.bbc.co.uk/bitesize/guides/zc7k2nb/revision/8</u> also watch <u>https://www.youtube.com/watch?v=IaZ8MtF3C6M</u> Have a go at the test on cell transport at <u>https://www.bbc.co.uk/bitesize/guides/zc7k2nb/test</u>

Useful resources:

David Attenborough First life https://www.youtube.com/watch?v=3enM7iGflsc (fits well with this topic)

https://www.thenational.academy/online-classroom

BBC Bitesize AQA trilogy science

Senecalearning.com