

Subject	Year	Term																
<b>Biology</b>	<b>9</b>	<b>2</b>																
Topic																		
<b>Unit 1 Cells (continued)</b>																		
Content (Intent)																		
<b>Prior Learning (Topic)</b> Unit 1 Cells																		
<p>Students will have learnt SKILLS including basic microscopy and drawing plant and animal cells. Carrying out practicals safely to obtain reliable results.</p> <p>Students will have learnt and built upon their KNOWLEDGE about the concept of cells, how they are differentiated to carry out their functions, how osmosis and diffusion occur and their definitions.</p> <p>Students will have UNDERSTOOD and can explain the osmosis required practical, the difference between active transport and osmosis, how cells divide (mitosis), the cell cycle and the uses of stem cells and meristems.</p>																		
<b>Future Learning (Topic)</b> Unit 2 Organisation																		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)																	
<p><b>Knowledge</b>  <b>Cell Biology</b> – Recall that the nucleus of a cell contains chromosomes made of DNA molecules. Each chromosome carries a large number of genes. In body cells the chromosomes are normally found in pairs. Describe the stages of the cell cycle, including mitosis. Explain how mitosis is important in the growth and development of multicellular organisms. Recognise and describe situations in given contexts where mitosis is occurring. Describe the function of stem cells in embryos, in adult animals and in the meristems in plants. Recall how bacteria multiply and describe how to prepare an uncontaminated culture using aseptic technique.</p> <p><b>Maths Skills</b> – data and graph interpretation</p> <p><b>Required practical activity:</b> investigate the effect of antiseptics or antibiotics on bacterial growth using agar plates and measuring zones of inhibition.</p>	<p><b>Key Piece of work (Homework)</b>  Pupils given a percentage and formative feedback provided.</p> <p><b>End of topic test</b>  Pupils given a percentage, formative feedback and GCSE equivalent grade.</p> <p><b>Year 9 end of term 2 and end of year exams</b>  Pupils given a percentage, formative feedback and GCSE equivalent grade.</p> <p><b>Interleaving Topics</b>  <b>Unit 1 Cells</b> – Key Terms and concepts will be reviewed prior to the start of this section of Unit 1 such as prokaryotic, eukaryotic cells, structure of cells and specialised cells.</p>																	
How can parents help at home?																		
<p>Ensure all class work is completed and homework submitted on time.</p> <p>Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.</p> <p>Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.</p> <p>Ensure all pupils have all their resources required for science lessons, including knowledge organisers, exercise books, pens and calculators</p>																		
Helpful further reading/discussion (including Reading and Vocabulary Lists)																		
<p><b>Reading</b>  AQA revision guides  AQA revision cards  Resources on Teams  EDUCAKE online learning platform.  GCSE POD  BHHS Knowledge organisers</p>	<p><b>Vocabulary Lists</b></p> <table style="width: 100%; border: none;"> <tr> <td>Eukaryotic</td> <td>Stem Cell</td> </tr> <tr> <td>Prokaryotic</td> <td>Undifferentiated</td> </tr> <tr> <td>Nucleus</td> <td>Meristem</td> </tr> <tr> <td>Chromosome</td> <td>Therapeutic cloning</td> </tr> <tr> <td>DNA</td> <td>Binary fission</td> </tr> <tr> <td>Cell cycle</td> <td>Disinfectant</td> </tr> <tr> <td>Mitosis</td> <td>Antibiotic</td> </tr> <tr> <td>Cytokinesis</td> <td></td> </tr> </table>		Eukaryotic	Stem Cell	Prokaryotic	Undifferentiated	Nucleus	Meristem	Chromosome	Therapeutic cloning	DNA	Binary fission	Cell cycle	Disinfectant	Mitosis	Antibiotic	Cytokinesis	
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