

Subject	Year	Term
Biology	9	2
Topic		
Cell Division and Stem Cells		
Content (Intent)		
Prior Learning (Topic)	Cells, Structure and Transport	
Students will have learnt SKILLS including basic microscopy and drawing plant and animal cells. Carrying out practicals safely to obtain reliable results.		
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.		
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.		
Future Learning (Topic)	The Body, Health and Lifestyle	
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
Cell division and stem cells – Understand how chromosomes are arranged in the nucleus and how each chromosome carries a large number of genes. Describe the stages of the cell cycle, including mitosis and its importance. Describe the function of stem cells. Recall how bacteria multiply and describe how their growth can be investigated.	Formative Feedback Task (End of Unit tests)	
	Pupils given formative feedback on: Biology – Cell Division and Stem Cells	
Maths Skills – data and graph interpretation	Assessment 2 (June): Summative assessment including: <ul style="list-style-type: none">Cell Division and Stem CellsCells and Transport Cumulative assessment will include Cells from Years 7 and 8	
Practical activity: investigate the effect of antiseptics or antibiotics on bacterial growth using agar plates and measuring zones of inhibition.		
Interleaving Topics		
Cells, structure and transport – Key Terms and concepts will be reviewed prior to the start of this section of work such as prokaryotic, eukaryotic cells and structure of cells.		
How can parents help at home?		
Ensure all class work is completed and homework submitted on time.		
Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.		
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.		
Ensure all pupils have all their resources required for science lessons, including exercise books, pens and calculators.		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Reading Resources on Teams EDUCAKE online learning platform. Glossaries	Vocabulary Lists Nucleus Chromosome DNA Cell cycle Mitosis	Stem Cell Undifferentiated Meristem Therapeutic cloning Binary fission