

Subject	Year	Term
Biology	12	1
Topic		
Module 2- Foundations in Biology		
Content (Intent)		
Prior Learning (Topic) GCSE Science		
Biological Molecules – Monomers and polymers, Carbohydrates, Lipids, Proteins, Enzymes, Nucleic acids, DNA replication, ATP, Water and Inorganic ions, protein synthesis. Cells – Eukaryotic cells, Prokaryotic cells and viruses, methods of studying cells, Mitosis, meiosis Transport across cell membranes, stem cells		
Future Learning (Topic) Module 3- Exchange and Transport; Module 4 – Biodiversity, evolution and disease		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
Biological Molecules Monomers and polymers, Carbohydrates, Lipids, Proteins Cells Eukaryotic cells, Prokaryotic cells and viruses, methods of studying cells, Required practical – Microscope viewing of cells Required Practical – Qualitative tests for biological molecules	End of topic test – A level grading and formative feedback given. Homework – a mark, A level grade and formative feedback provided.	
Biological Molecules Nucleic acids, DNA replication, ATP, Water and Inorganic ions, genetic code, DNA replication, protein synthesis. Enzymes Required Practical – Factors affecting enzyme action, serial dilution Cells Transport across cell membranes, Mitosis, meiosis, stem cells Required Practical – Root tip squash to show mitosis Required Practical –Use of colorimeters Required Practical – Investigation into variables that affect membrane permeability. Required Practical – thin layer chromatography	End of topic tests – A level grading and formative feedback given. Autumn Exam – A level grading and formative feedback given. Homework – mark, A level grade and formative feedback given.	
How can parents help at home?		
Ensure all class notes are complete and homework submitted on time Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters. Encourage pupils to actively research future University courses and careers.		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Reading OCR revision guides OCR CGP Text book Essential Maths Skills for AS/A level Biology CGP Resources on Teams Websites https://www.ocr.org.uk/qualifications/as-and-a-level/biology-a-h020-h420-from-2015/specification-at-a-glance/ Mrs Millers Blog	Vocabulary Lists Organelles Endoplasmic Reticulum Golgi Apparatus Vesicles Electron Microscopy Mitosis Centrioles Ester	peptd Glycosidic Complementary Specificity Active site Induced fit Inhibitor c-factor Q10