

Subject	Year	Term										
Chemistry	12	1										
Topic												
Physical and Organic Chemistry												
Content (Intent)												
Prior Learning (Topic)												
AQA A Level Chemistry <ul style="list-style-type: none"> Physical Chemistry - Atomic Structure, Amount of Substance, Bonding and Simple Molecular Shapes Organic Chemistry - Introduction of Organic Chemistry Inorganic Chemistry –Periodicity 												
Future Learning (Topic)												
Physical, Inorganic and Organic Chemistry												
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)											
Physical Chemistry 1. Atomic Structure and the Periodic table Fundamental Particles, Mass Number and Isotopes Electronic Configuration, Mass Spectroscopy Ionisation Energy 2. Amount of Substance Ar, Mr, The mole and Avogadro’s Constant The ideal Gas Equation, Empirical and Molecular Formula Balancing equations and associated calculations Required practical 1 Make up a volumetric solution and carry out a simple acid base titrations	Early Hurdle Exam – October of year 12. A level grading and formative feedback given. Summative Assessment 1 and 2 in year 12 and 13. A level grading and formative feedback given. End of topic tests - A level grading and formative feedback given. Homework – a percentage, A level grade and Formative feedback provided.											
Physical Chemistry 3. Bonding and Simple Molecular Shapes Ionic, covalent, metallic and dative covalent bonding. Intermolecular forces, bond polarity, simple shapes of ions and molecules. Inorganic Chemistry 1. Periodicity Organic Chemistry 1. Introduction to Organic Chemistry.	Early Hurdle Exam – October of year 12. A level grading and formative feedback given. End of topic tests - A level grading and formative feedback given. Homework – a percentage, A level grade and Formative feedback provided.											
How can parents help at home												
Ensure all class notes and content files 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 Text Book - CGP New A-Level Chemistry for AQA: Year 1 & 2 Websites <ul style="list-style-type: none"> A-levelchemistry.co.uk ChemGuide.co.uk (written by Jim Clark) AQA website Books – Calculations in AS/A level Chemistry by Jim Clark Essential Maths Skills for A- Level Chemistry – CGP UPLEARN	Vocabulary Lists <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Mass Spectroscopy</td> <td style="width: 50%;">Temporary Induced Dipole</td> </tr> <tr> <td>Ionisation Energy</td> <td>Polarity</td> </tr> <tr> <td>Van Der Waals Forces</td> <td>Electronegativity</td> </tr> <tr> <td>Hydrogen Bonding</td> <td>Dative Covalent</td> </tr> <tr> <td>Permanent Dipole-Dipole</td> <td>Periodicity</td> </tr> </table>		Mass Spectroscopy	Temporary Induced Dipole	Ionisation Energy	Polarity	Van Der Waals Forces	Electronegativity	Hydrogen Bonding	Dative Covalent	Permanent Dipole-Dipole	Periodicity
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