Curriculum Plan	Subject	Chemistry – Ozone (OZ)	Year	12

Spring 2	W/C 22nd February	W/C 1st March	W/C 8th March
How you will access home learning	The PowerPoint and lesson materials will be made available on the day of each lesson either on Show My Homework, g drive or uploaded to your class group on teams (your teacher should make you aware of this). You will need access to your Chemistry AS textbook via Kerboodle.		
How you be able to interact with your teacher and gain feedback on your work	You will be able to join each lesson via Microsoft Teams. This will enable you to listen to teacher delivery, to ask questions, and to complete the same tasks live, as if you were working in the lesson. If you can't make the lesson live then a recording will be saved on teams and be available in the files section. You can join in with questioning in the lesson using the chat function to check your understanding. For any tasks that can't be self-assessed using the lesson PowerPoints or Kerboodle (end of chapter questions), oral feedback will be given during the live teams' sessions.		
Retrieval How we will help you to recall previously learnt knowledge	Questions to test recall knowledge of pollutant gases and their effects from GCSE will be used. The maths content in OZ2 builds on EL2, covered before Christmas, so recap questions will be set.	This week's work is entirely new (no build from GCSE) so retrieval tasks will centre around previously covered A level topics (EL, DF and ES).	Questions to test recall knowledge of rates of reaction from GCSE will be used.
New Learning What you will be learning about this week	**OZ1–What's in the air & OZ2–Screening the sun** In OZ1 you will learn the correct terms for layers of the atmosphere and carry out calculations to convert concentrations of gases from percentage composition to parts per million. In OZ2 you will use E = hv to compare the energy of different forms of radiation and describe energy changes in simple molecules and explain why the atmosphere acts as a sunscreen.	**OZ3 – How is ozone formed in the atmosphere** OZ3 aims to define heterolytic and homolytic fission and to introduce equations to represent initiation, propagation and termination stages of radical chain reactions.	**OZ4 – Ozone: Here today and gone tomorrow** OZ4 describes methods of investigating reaction kinetics, lists factors which affect the rate of a reaction and explain the effect of each factor using collision theory. Finally, enthalpy profiles and Maxwell-Boltzmann distributions to show the effect of temperature and catalysts are discussed.
How we will teach you the new knowledge or ideas	There will be a brief section of teacher led explanations and discussions introducing OZ1. PowerPoint content and teacher modelling will be used to support the OZ2 activities below.	There will be a detailed section of teacher led explanations and discussions about OZ3. PowerPoint content and teacher modelling will be used to support the OZ3 activities below.	There will be a brief section of teacher led explanations and discussions. PowerPoint content and teacher modelling will be again be used to support the activities below.
Activities that will help you learn and practice what you've been taught	OZ1 content will be acquired by note taking using the textbook on Kerboodle. Practice questions will form the basis of consolidation in OZ2.	Exam style questions practicing mechanism drawing will be used to consolidate learning in OZ3.	Practice questions will be used together with practical work. Students at home will be able to interact through access to experimental procedures and model data to answer the questions that follow.
What you can do if you are stuck	If you are accessing a live lesson through Microsoft teams, the chat function can be used to ask any questions you wish to be answered immediately and within the lessons. Any questions relating to specific homework tasks set on SMHW can be asked through the chat function on SMHW, and failing that, an email can be sent to your teacher to ask any general questions.		

		W/C 15th March	W/C 22nd March	W/C 29th March
How you will access home learning		The PowerPoint and lesson materials will be made available on the day of each lesson either on Show My Homework, g drive or uploaded to your class group on teams (your teacher should make you aware of this). You will need access to your Chemistry AS textbook via Kerboodle.		
How you be able to interact with your teacher and gain feedback on your work		You will be able to join each lesson via Microsoft Teams. This will enable you to listen to teacher delivery, to ask questions, and to complete the same tasks live, as if you were working in the lesson. If you can't make the lesson live then a recording will be saved on teams and be available in the files section. You can join in with questioning in the lesson using the chat function to check your understanding. For any tasks that can't be self-assessed using the lesson PowerPoints or Kerboodle (end of chapter questions), oral feedback will be given during the live teams' sessions.		
Retrieval How we will help you to recall previously learnt knowledge		Questions to recall knowledge on catalysts (DF5), reaction profiles (DF1) and radicals (OZ3) will be used.	Questions to recall knowledge on electronegativity (DF6) and drawing/naming isomers (DF9) will be used.	Questions to recall knowledge of reaction mechanisms (DF6 and OZ3) will be used.
New Learning	What you will be learning about this week	**OZ5 – What is removing the Ozone?** OZ5 defines homogeneous catalysis, looks at enthalpy profiles to compare reactions with and without catalysts, and uses equations with radicals to explain how haloalkanes are depleting ozone levels in the stratosphere.	**OZ6–The CFC story & OZ7–The Ozone hole** OZ6 describes why bonds can be polar, defines an intermolecular bond and a dipole, and explains why some molecules have permanent dipoles. OZ7 introduces another intermolecular bond called a Hydrogen bond.	**OZ8 – The state of the Ozone layer now** OZ8 looks at naming and drawing amines. It then defines and explains the role of a nucleophile, and details reaction mechanism for nucleophilic substitution of haloalkanes. The final section looks at experimental data to investigate haloalkane reactivity.
	How we will teach you the new knowledge or ideas	There will be a detailed section of teacher led explanations and discussions about OZ5. PowerPoint content and teacher modelling will be used to support the OZ5 activities below.	Again, there will be a detailed section of teacher led explanations and discussions about OZ6. Interactive boardworks presentations will be used to bring the ideas to life.	There will be a brief section of teacher led explanations and discussions. PowerPoint content and teacher modelling will be again be used to support the activities below.
	Activities that will help you learn and practice what you've been taught	Exam style questions practicing mechanism drawing will be used to consolidate learning in OZ5.	Exam style questions targeting different types of bonding will be used to consolidate learning in OZ6.	Practice questions will be used together with practical work. Students at home will be able to interact through access to experimental procedures and model data to answer the questions that follow.
	What you can do if you are stuck	If you are accessing a live lesson through Microsoft teams, the chat function can be used to ask any questions you wish to be answered immediately and within the lessons. Any questions relating to specific homework tasks set on SMHW can be asked through the chat function on SMHW, and failing that, an email can be sent to your teacher to ask any general questions.		