

# Chemistry 1<sup>st</sup> Year Scheme of Work 2025-26

w/b	Content – teacher 1 (double lesson)	Test – teacher 1 (double lesson)	Practical – teacher 1 (double lesson)	Content – teacher 2 (single lessons)	Test – teacher 2 (single lessons)	Practical – teacher 2 (single lessons)
Sep 8 <sup>th</sup>	Course introduction and lab rules 2.1.1 Atomic structure and isotopes		1. Magnesium silicide	2.1.1 Relative atomic masses 2.1.2 Compounds, formulae		
Sep 15 <sup>th</sup>	2.1.2 Balancing equations	0. Induction test		2.1.5 REDOX: oxidation numbers and redox reactions		
Sept 22 <sup>nd</sup>	2.1.3 Amount of substance: the mole 2.1.3 Determining empirical and molecular formulae			2.2.1 Electronic structure: energy levels, shells, sub-shells, atomic orbitals, electron configurations		
Sept 29 <sup>th</sup>	2.1.3 Water of crystallisation		2. Finding the formula of copper oxide (preparation for practical 3)	2.2.2 Bonding and structure: ionic, covalent, dative covalent		
Oct 6 <sup>th</sup>	2.1.3 Reacting mass calculations		3. ASSESSED PRACTICAL: PAG 1 Determination of the formula for magnesium oxide	2.2.2 Bonding and structure: ionic, covalent, dative covalent		
Oct 13 <sup>th</sup>		1. Atomic structure & $\frac{1}{2}$ moles	4. Finding the value of x in the formula: $\text{CuSO}_4 \cdot x\text{H}_2\text{O}$	2.2.2 Shapes of molecules and ions		
Oct 20 <sup>th</sup>	2.1.3 Volumes of gases		5. Finding the relative atomic of an unknown metal	2.2.2 Electronegativity and bond polarity		
Autumn $\frac{1}{2}$ term: Oct 27 <sup>th</sup> – Oct 31 <sup>st</sup>						
Nov 3 <sup>rd</sup>	2.1.3 Volumes and concentrations of solutions			2.2.2 Intermolecular forces		
Nov 10 <sup>th</sup>	2.1.3 Ideal gases			3.1.1 Periodicity: trends in electron configuration and ionization energy	4. Bonding, shape & intermolecular forces	
Nov 17 <sup>th</sup>	2.1.3 Percentage yield and atom economy 2.1.4 Acids and bases			3.1.1 Periodic trends in structure and melting point		
Nov 24 <sup>th</sup>	2.1.4 Acid-base titrations		[Reactions of acids]	3.1.1 Periodic trends in structure and melting point		
Dec 1 <sup>st</sup>	2.1.4 Acid-base titrations	2. Full moles	6a. Preparing a standard solution	3.1.2 Group 2		9. Group 2
Dec 8 <sup>th</sup>			6b. Determination of concentration of HCl (preparation for practical 7)	3.1.3 Group 7 properties & displacement reactions	5. Periodicity	
Dec 15 <sup>th</sup>			7. ASSESSED PRACTICAL: PAG 2 Identification of an unknown carbonate	3.1.3 Group 7 uses & disproportionation		10. Group 7: The halogens
Christmas holidays: Dec 18 <sup>th</sup> – Jan 2 <sup>nd</sup>						
Jan 5 <sup>th</sup>	4.1.1 Organic Chemistry: basic concepts	3. Acids, bases & electrons		3.1.4 Qualitative analysis: tests for halide ions		11. Group 7: The halides
Jan 12 <sup>th</sup>	4.1.1 Organic Chemistry:			3.1.4 Qualitative analysis: tests for ions		12a. Demo: Qualitative analysis (preparation for 12b)

