MINISTRY OF GENERAL EDUCATION
COMMON SCHEME OF WORK
GRADE 11 TERM TWO 2018 AND BEYOND
PURE CHEMISTRY

WEEK	TOPIC / CONTENT	SPECIFIC OUTCOMES	METHODS	REFERENCES
1	**REVISION THE MOLE CONCEPT** Relative masses The mole	Describe Relative atomic mass and relative molecular mass. Calculate the relative formula mass of a compound	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
2		Describe a mole. Determine the physical masses (m) of any substance using the molar mass (Mr) and the physical volume (v) of any gas at r.t.p and vice versa.	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
3		Describe the relationship of Avogadro's law to reacting moles and volumes of gases at r.t.p and s.t.p.	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
4	TEST 1	Determine the concentration of a solution and apply dilution law	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
5		Illustrate calculations involving stoichiometric reacting moles and volumes of gases and solutions	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa New certificate Chemistry Fundamentals of chemistry
6		Describe and calculate the percentage yield in a reaction and the percentage purity of a substance Determine limiting reagent in a given reaction	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
7		Demonstrate calculations involving different types of acid–base titration	▪ Question and answer	O level chemistry for southern Africa Key point Science – Chemistry

		reactions	▪ Discussion	New certificate Chemistry Fundamentals of chemistry
8	Empirical and Molecular Formulae **TEST 2**	Calculate the percentage composition of elements in a compound. Determine the empirical formulae of a compound given the molecular formula	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
9		Determine the empirical and molecular formulae using percentage composition or masses	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
10	**CHEMICAL REACTIONS** Rates of chemical reactions	Describe rate of a chemical reaction. Demonstrate the factors that affect the rates of chemical reactions	▪ Question and answer ▪ Discussion ▪ Practical	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
11		Demonstrate the factors that affect the rates of chemical reactions	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
12	End of term tests	Pass the end of term test	▪ Question and answer	End of term papers
13	End of term tests	Pass the end of term test	▪ Question and answer	End of term papers