MINISTRY OF GENERAL EDUCATION
COMMON SCHEME OF WORK
GRADE 12 TERM ONE 2020 AND BEYOND
PURE CHEMISTRY

WEEK	TOPIC / CONTENT	OBJECTIVES (PSBAT)	METHODS	REFERENCES
1	**REVISION CHEMISTRY AND ELECTRICITY** Conductors	Classify conductors and non-conductors Classify electrolytes and non-electrolytes Describe what electrolysis is Describe the products at the electrodes during electrolysis of molten binary ionic compounds	▪ Question and answer ▪ Discussion ▪ Lecture	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
2		Describe the products at the electrodes during electrolysis of aqueous ionic solutions Describe the industrial applications of electrolysis Calculate the quantity of electrolytic products	▪ Question and answer ▪ Discussion ▪ Demonstrate	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
3		Describe what a chemical cell is Compare electrolytic cells and simple cells	▪ Question and answer ▪ Discussion ▪ Lecture	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
4	**METALS** General properties of metals Reactivity and Electro Chemical Series **TEST 1**	Describe diagrammatic representations of pure metals Describe the physical properties of metal Describe the reactivity series of metals Describe the chemical properties of metals	▪ Question and answer ▪ Discussion ▪ Lecture	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
5		Explain the apparent non reactivity of	▪ Question and	O level chemistry for southern Africa

		aluminium. Demonstrate an order of reactivity	answer ▪ Discussion ▪ Lecture	New certificate Chemistry Fundamentals of chemistry
6		Describe the effects of heat on hydroxides, carbonates, nitrates of metals and ammonium compounds.	▪ Question and answer ▪ Discussion ▪ Demonstratio n	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
7		Describe the extraction of copper, iron and zinc from their ores. Describe the uses of copper, iron, zinc and aluminium	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
8	Alloys **TEST 2**	Explain the harmful effects of some metals. Describe alloys. Describe diagrammatic representations of alloys. Explain the advantages of using alloys over pure metals.	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
9	Corrosion	Describe corrosion Relate corrosion to the reactivity of metals. Describe different methods of preventing corrosion.	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
10	**NON – METALS** General properties of non-metals Hydrogen	Describe the physical and chemical properties of non-metals Demonstrate the laboratory preparation, collection and test for hydrogen. Describe the physical and chemical properties of hydrogen Describe the uses of hydrogen.	▪ Question and answer ▪ Discussion ▪ Demonstration	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
11	Oxygen	Demonstrate the laboratory preparation, collection and test for oxygen. Describe the physical and chemical	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry

		properties of oxygen Describe the uses of oxygen		
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