MINISTRY OF GENERAL EDUCATION
KAMBULE TECHNICAL SECONDARY SCHOOL
GRADE 12 SCHEME OF WORK
TERM TWO 2018
PURE CHEMISTRY

WEEK	TOPIC / CONTENT	OBJECTIVES (PSBAT)	METHODS	REFERENCES
1	**REVISION** Nitrogen Ammonia	Describe industrial manufacture of nitrogen. Explain the characteristics and importance of Nitrogen as a gas. Demonstrate the preparation collection and test for ammonia in the laboratory	▪ Question and answer ▪ Discussion ▪ Demonstration	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
2		Describe the manufacture of ammonia. Describe the physical and chemical properties of ammonia.	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
3		Describe the thermal dissociation of ammonium salts Describe the uses ammonia	▪ Question and answer ▪ Discussion ▪ Demonstration	O level chemistry for southern Africa New certificate Chemistry Fundamentals of chemistry
4	Nitric acid **TEST 1**	Describe the manufacture of nitric acid Explain the importance of nitrogenous fertilizers Describe the effects of nitrogenous fertilizers on the environment	▪ Question and answer ▪ Discussion ▪ Lecture	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
5	Chlorine	Demonstrate the laboratory preparation, collection and test for chlorine gas. Describe the physical and chemical properties of chlorine gas Describe the uses of chlorine. Describe the industrial manufacture of chlorine	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
6	Hydrogen chloride	Demonstrate the method for preparation, collection and test for hydrogen	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry

		chloride gas Describe the physical and chemical properties of hydrogen chloride gas		Fundamentals of chemistry
7	Sulphuric acid	Demonstrate the method for preparation of hydrochloric acid. Describe the reactions of dilute hydrochloric acid	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
8 **TEST 2**	Sulphur dioxide	Describe the formation of sulphur dioxide. Demonstrate the laboratory preparation, collection and test for sulphur dioxide Describe the physical and chemical properties of sulphur dioxide	▪ Question and answer ▪ Discussion ▪ Practical	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
9	Sulphuric acid	Describe the uses of sulphur dioxide Describe the industrial manufacture of sulphuric acid. Describe the uses of sulphuric acid.	▪ Question and answer ▪ Discussion	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
10	Carbon and carbonates	Describe allotropes Describe the physical properties of the allotropes of carbon Describe the formation and properties of carbon monoxide Demonstrate the laboratory preparation, collection and the test for carbon dioxide Describe the physical and chemical properties of carbon dioxide. Describe the uses of carbon dioxide	▪ Question and answer ▪ Discussion ▪ Demonstration	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry
11	Silicon	Describe the greenhouse effect Describe the manufacture of lime from limestone. Describe the uses of lime and slaked lime. Describe the uses of limestone. Describe the properties of silicon. Describe the use of silicon. Describe what silicones are Compare the fire resistance of silicone plastics to carbon based	▪ Question and answer ▪ Discussion ▪ Inquiry	O level chemistry for southern Africa Key point Science – Chemistry New certificate Chemistry Fundamentals of chemistry

		macromolecules Describe the uses of silicon dioxide (sand)		
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