MINISTRY OF GENERAL EDUCATION

NORTHERN PROVINCE

PROVINCIAL SCHEMES OF WORK FOR CHEMISTRY 5070

Subject: CHEMISTRY 5070   Grade: 11   Term: Two   Year: 20….   Teacher: ----------------------   periods per week: 6

WEEK	TOPIC	SUB-TOPIC	SPECIFIC OUTCOMES	METHODOLOGY	SUGGESTED EXPERIMENTS	REFERENCES
1 02/05/16	**The mole concept**	**Relative masses**	Describe what Relative Atomic Mass and relative molecular mass is. Calculate the relative formula mass of a compound	Calculations Discussion Questions and Answer		General Certificate IGCES
2 09/05/16		**The mole**	Describe what a mole is 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.	Discussion		Complete Chemistry

		The mole	Describe the relationship of Avogadro's law to reacting moles and volumes of gases at r.t.p and s.t.p.	Group Work Discussion		IGCES General Chemistry
3 16/05/16						
4 23/05/16		The mole	Determine the concentration of a solution in applying dilution law.	Question and answer	Preparation of solutions of known concentrations Dilution of solutions of known concentrations Acid base titration and volumetric analysis	Complete chemistry senior Secondary chemistry 11 Chemistry
5 30/05/16		The mole	Illustrate calculations involving stoichiometric reacting moles and volumes of gases and solutions.	Demonstration Discussion		
6 06/06/16		The mole	Calculate the percentage yield in a reaction and the percentage purity of a substance Determine limiting reagent in a given reaction	Discussion Group work	-Experiments involving electronic beams measuring actual mass in comparison with theoretical masses.	General Chemistry IGCES

7 13/06/16		**The mole**	Demonstrate calculations involving different types of acid–base titration reactions.	Demonstration Discussion	Titration of acid base type Also Titration involving potassium permanganate and dichromate	General Chemistry (A levels) IGCES
8 20/06/16		**Empirical and Molecular formulae**	Determine the percentage composition of elements in a compound. Determine the empirical formulae of a compound given the molecular formula	Demonstration Discussion	-	GCSE Chemistry
9 27/06/16		**Empirical and Molecular formulae**	Determine the empirical and molecular formulae using percentage composition or masses.	Demonstration Discussion		GCSE Chemistry Senior Secondary chemistry 12

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10 04/07/16	Chemical reactions and energy changes	Rates of chemical reactions	Describe rate of a chemical reaction. Demonstrate the factors that affect the rates of chemical reactions	Question and answer Discussion	-Determination of rates of chemical reactions - Demonstrations on the effect of temperature, pressure, concentration and catalyst.	GCSE Chemistry Senior Secondary chemistry 11
11 04/07/16		Rates of chemical reactions	Describe methods of controlling the rate of chemical reactions. Describe the effect of a catalyst on the activation energy	Discussion Demonstration Group Work	Use of manganese(iv) oxide in preparation of oxygen	General certificate IGCES
12 and 13 11/07/16 To 18/07/16	Revision and End of Term Test					