

Addis Ababa City Administration Educational Bureau

February 2023 Second Semester Chemistry Table of Specification for Grade 12

Unit	Sub units	Period allotments per sub units	Number of items per sub units in terms of behavioural dimension
1.Solution	1.1.Homogeneous and Heterogeneous Mixtures	1	3Know,3Comp, 3App
	1.2.Types of solution	2	3Know,3Comp
	1.3.The solution Processes	5	6Know, 6Comp, 9App
	1.4.Solubility as an Equilibrium processes	4	6Know,6Comp,3App, 3Ana,9Synt
	1.5.Ways of Expressing concentration of solution	7	6Know, 6Ana
	1.6.Preparation of solution	2	3Comp, 3Ana, 12Synt
	1.7.Solution Stoichiometry	3	3App
	1.8.Describing Reactions in Solution	1	3Comp, 3Synt
	1.9.Colligative properties of solutions	5	12Know,6Comp, 9Ana
	Total	30	36Know, 30Comp,24App,21Ana,24Synt
2.Acid-Base Equilibrium	2.1.Acid-Base Concepts	5	39Know, 15Comp, 1Synt
	2.2.Ionic Equilibria of Weak Acids and Bases	9	6Know,9Comp,3App,21Ana,9Synt,3Eva
	2.3.Common ion Effect and Buffer Solution	4	9Know,6Comp,3App,3Ana
	2.4.Hydrolysis of Salt	2	3Know, 9Comp
	2.5.Acid-Base Indicators	6	12Know,6Comp,6Ana,6Synt

	Total	26	69Know,45Comp,6App,30Ana,30Synt,3Eva
3.Intoduction to Chemical Thermodynami c	3.1.Common Thermodynamics Terms	2	15Know,15Comp,3Ana
	3.2.First law of Thermodynamics and some Thermodynamics quantities	3	3Know,3Ana
	3.3 Thermo chemistry	4	18Know,6Comp,3App,9Ana,3Synt,3Eva
	3.4 Entropy and second law of thermodynamics	3	3Know, 12Comp,12Ana
	Total	12	39Know,33Comp,3App,27Ana,3Synt,3Eva
Unit	Sub units	Period allotments per sub units	Number of items per sub units in terms of behavioural dimension
4. Electrochemist ry	4.1 Reduction- oxidation reacting	5	9Know, 12Comp
	4.2 Electrolysis of aqueous solutions	6	6Know, 12Comp, 3Ana ,6Synt
	4.3 Quantitative aspects of electrolysis	3	6Know, 6App, 6Synt
	4.4 Industrial application of electrolysis	2	3Know, 6Comp, 3App
	4.5 Voltaic cells	3	12Know, 24Comp, 9Ana, 3Synt, 6Eva
	Total	21	36Know, 54Comp,3App, 15Synt, 6Eva
5. Some Elements in Nature and Industry	5.1 Some elements in nature	5	6Know, 9Comp
	5.2 Some elements in industry	12	3Know, 78Comp
	Total	17	9Know, 87Comp
6: Polymers	6.1 Polymerization	2	3Know, 9Comp
	6.2 Synthetic polymers	5	9Know,15Comp
	6.3 Natural polymers	7	15Know, 33Comp, 3Ana, 9Synt
	Total	14	27Know, 57Comp, 3Ana, 9Synt

	Total From all units	120	218Know, 270Comp,36App,81Ana,81Synt,12Eva
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