

Table of Contents: Lab Work

SCH3UE_07-08

Lab #	Syllabus Section	Title of Investigation	Course Unit & Section Tested
1		Thickness of Al. Foil	Measurement + Data
2		Number of molecules in: H_2O , Chalk and Candy	Mols
3		Percent Composition of MgO	Mols
4		Formula of a hydrate, Epsom salt	Mols - planning
5		Empirical Formula of MgCl_2	Mols
6		Simulation of an Air Bag	Gases - planning
7		Volume vs. Temperature Graph: Computer Analysis	Gases: DP: ITC
8		% Sodium hydrogen carbonate in an Alka-Seltzer Tablet	
9		Pressure required to pop Popcorn	Gases - Planning
10		Mass Relationship in an equation: Aluminum and Copper (II) chloride dihydrate	M S , DC, DP&C
11		Determination of Solubility of a Salt	MS
12		Making a solution	MS
13		Dilution of a solution	MS
14		Determination of Volume of gas at SATP: $\text{Mg} + \text{HCl}$	MS, PS
15		Determination of Molar Volume from experimental Data	Gases: DP
16		Estimation of concentration of a Solution using a spectroscope	Solutions: DC, DP
17		Double Displacement Reactions: Using Solubility Rules	
18		Using Solubility Graphs: Computer Analysis	ITC
19		Gravimetric Analysis: $\text{Pb}(\text{NO}_3)_{2(\text{aq})} + \text{K I}_{(\text{aq})}$	DC, DE &C
20		Planning Lab: Stoichiometry of a Reaction: $\text{Na}_2\text{CO}_3 + \text{CaCl}_2$	Planning Lab, Lab Quiz
21		Titration: Standardization of NaOH using HCl	
22		Observing the Hydrogen Spectrum	Atomic Theory

23+24+25

Qualitative Analysis: 3 hours

- 26 Electrolytes: Strong and Weak: Acid –Base: ITC
- 27 Titration Curve for a strong acid-strong Base
- 28 Lab: Testing for Polarity of Compounds
- 29 Lab activity: Polarity of Molecules and IMFA's
- 30 Planning Lab: testing the structure of Ionic, molecular covalent, Network and metallic substances
- 31 Enthalpy of Ionic substances: Lattice Energy Vs Hydration Energy
- 32 Enthalpy of a reaction: $\text{Zn} + \text{CuSO}_4$
- 33 Hess's Law: $\text{NaOH} + \text{HCl}$