

Honour Chemistry Unit 3 Outline: Quantitative Relationship in Chemical Change

Chapter 8: Chemical Reaction

Classes	Topics	Suggested Reading	✓	Assignments	✓
1	Reactants, Products, Catalysts, Word Equations, Chemical Equations, Balancing Equations, Coefficients	8.1 Describing Chemical Change (pg. 203 – 211)		pg. 206 #1, 2; pg. 209 #3, 4; pg. 210 #5 to 7; pg. 211 #8 to 11	
2	Types of Reaction (Composition, Decomposition, Single Replacement, Double Replacement, Hydrocarbon Combustion), Neutralization, Precipitation, Solubility Table	8.2 Types of Chemical Reactions (pg. 212 – 223)		pg. 214 #13, 14; pg. 216 #15, 16; pg. 218 #17; pg. 220 #18, 19; pg. 221 #20, 21; pg. 224 #22, 23 (omit 23c)	
3	Complete Ionic Equations, Net Ionic Equations, Spectator Ions, Precipitate,	8.3 Reactions in Aqueous Solution (pg. 225 – 228)		pg. 226 #25, pg. 228 #26 to 31	
4	Chapter 8 Quiz (December 3, Monday)			Chapter 8 Review pg. 232 #32 to 36, 38 to 53 (omit 43e, 46 & 52c)	

Chapter 9: Stoichiometry

Classes	Topics	Suggested Reading	✓	Assignments	✓
1	Stoichiometry, Interpreting Stoichiometry using (Moles, Atoms/Molecules, Mass, Volume at STP and SATP), Conservation of Mass	9.1 The Arithmetic of Equations (pg. 237 – 241)		pg. 240 – 241 #3, 4, 6 to 8	
2	Mole Ratio, Gravimetric Stoichiometry, Gas Stoichiometry (STP and SATP)	9.2A Chemical Calculations (pg. 242 – 250)		pg. 244 #9b, 10; pg. 245 #11, 12; pg. 248 #13, 14, pg. 249 #15, 16; pg. 250 #17 to 22	
3	Gas Stoichiometry (Ideal Gas), Solution Stoichiometry (Precipitation and Neutralization), Titration, Titrant, Analyzed, Buret	9.2B Chemical Calculations (Notes)		Gas and Solution Stoichiometry Worksheet	
4	Limiting Reagent, Excess Reagent, Percentage Yield, Percentage Error	9.3 Limiting Reagent and Percent Yield (pg. 252 – 259)		pg. 254 #23, 24; pg. 255 #25; pg. 256 #26; pg. 258 #27, 28; pg. 259 #29 to 32	
5	Chapter 9 Quiz (December 10, Monday)			Chapter 9 Review pg. 262 #34 to 41, 43 to 47	
6	Lab #4: Gravimetric and Solution Stoichiometry (December 12, Wednesday)			Lab #4 Report (Due January 8, Tues)	
7	Unit 3 Test (covers Chapters 8 and 9) (December 13, Thurs)			pg. 233–234 #54 to 58, 60 to 62, 64; pg. 235 #1 to 13 pg. 263–264 #51 to 56, 58; pg. 265 #1 to 12	