

Assignment #	Corresponding lectures & topics discussed	Discussion sections where discussed	Text book problems	ACS guide problems
1	Jan 29 & 31 Kinds of matter Density is a measure of concentration Dimensional analysis/conversions Significant figures & exponential notation Structure of atoms & evidence Isotopes (protons, neutrons, symbols)	Fri Feb 1 Tues Feb 5 Thurs Feb 7	Ch. 1: 1, 5, 8, 11, 15, 23, 25, 29, 35, 37, 39, 45, 63 Ch. 2: 3, 5, 17, 23, 35, 47 Additional practice problems on types of matter (see website)	p.32#SM-4, p.34#SM-8, p.38#15, p.40#28 pp.1-3#AS-1, 3, 4 & 5 pp.5-7 #1, 2, 3, 8, 12
2	Feb 5 & 7 Ions (electrons not balanced with protons) Molecules vs. ions Chemical formulas Naming ionic compounds, molecular compounds and simple acids	Fri Feb 8 Tues Feb 12 Thurs Feb 14	Ch. 2: 9, 25, 29, 39, 41, 43, 49, 53, 55, 57, 59, 61, 63, 69, 89 Additional practice problems on ionic vs. molecular bonding (see website)	p.1#AS-2 pp. 5-7 #4, 5, 6, 7, 10, 13, 16
3	Feb 12 & 14 Atomic weight, molar mass Avogadro's number, moles Percent composition Determining empirical & molecular formulas from percent composition Chemical equations: writing, balancing Types of chemical reactions Straightforward stoichiometry Limiting reagents (if time)	Fri Feb 15 Tues Feb 19 Thurs Feb 21	See warning below*** Ch. 3: 1, 4, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 33, 39, 43, 47, 51, 59, 63	pp. 21-26 #ST-1, 2, 3, 4, 5, 7, 8 and 9 pp. 27-30 #1-22 and 26-30
4	Feb 19 & 21 Limiting reagents & percent yield Solutions: solvent, solute, concentration Solubility, electrolytes Precipitation rxns and qualitative analysis Net ionic equations	Fri Feb 22 Tues Feb 26 Thurs Feb 28	Ch. 3: 35, 45, 67, 71, 73, 75, 79, 81 Ch. 4: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 25, 27, 90, 92 Additional practice problems on net ionic equations (see website)	p. 26 #ST-10 p. 29 #27
5	Feb 26 (Exam 1 on Feb 28) Review for Exam 1 Exam 1 covers up through section 4.2	Fri Feb 29 Tues Mar 4 Thurs Mar 6	Ch. 4: 23, 24 ^o , 28 ^o Additional practice problems on chemical reactions	p. 107 #LC-9 p. 111 #16

*** Warning: Assignment 3 is a very big assignment because many of the problems are time consuming to solve. Be sure to budget plenty of time to work on it. The material covered in Assignment 3 forms the conceptual and mathematical foundation of all that we will do this semester, so it is very important that you master this material. You will learn much more if you do the problems before you attend discussion section.