

2017 - 2018 AP CHEMISTRY
Mrs. Virkler
Summer Assignment

Welcome to AP Chemistry. Next year we will have nineteen chapters to cover in approximately 30 weeks. Although that appears to be a reasonable task, several of the chapters require a minimum of two weeks to cover fully. To make this a more manageable task for us during the school year, you should begin preparing during the summer. With that thought in mind, the assignment below is to be completed over the summer. The assignment will cover a review of several areas introduced in honors chemistry and an introduction to some new but related material. The five chapters assigned below will quickly be covered within the first month of school and we will have tests on them starting the first week of school. Please pace yourself over the summer. Do not leave the entire assignment to be done in the few weeks before school starts. I recommend 1-1 1/2 weeks for chapters 1 & 2 then 1-2 weeks per chapter for the rest. While you are reading the chapters and doing the questions, make a list of any section or question you would specifically like to cover during our review in the first weeks of school. One effective way to mark the areas you have questions on it to write your question on a *Post it* note and place it on the page in your text giving you difficulty. You may also e-mail me any questions at mbvirkler@aol.com. I will try to respond to you in a timely manner and answer your question if it can be done easily via e-mail. I will be out of town for about ten days in July and may not have internet access.

The assignment is from *Chemistry, 9th Edition*, by Zumdahl & Zumdahl, published by Brooks/Cole Cengage Learning Company

For each of the chapters below: (1) read the entire chapter, (2) answer all designated questions and problems at the end of the chapter. Please work neatly, show all your work, and do each chapter so that it can be turned in separately.

Chapter 1: Chemical Foundations, questions on pp 33-41, 18, 20, 29, 36, 68, 72, 78, 111, 112, 113, 118 (11 questions)

Chapter 2: Atoms, Molecules, and Ions (review the list of polyatomic ions on page 65 of the text and memorize the ones that are not familiar to you), questions on pp 73-77, 11, 12, 13, 16, 37, 44, 67, 68, 69, 76, 80, 84, 86 (13 questions)

Chapter 3: Stoichiometry; questions on pp 126-136; 10, 11, 13, 18, 20, 22, 34, 38, 44, 70, 72, 74, 78, 86, 90, 92, 94, 100, 106, 120, 124, 138, 150, 172, (24 questions)

Chapter 4: Types of Chemical Reactions and Solution Stoichiometry (thoroughly familiarize yourself with the solubility rules on pp 156- **better yet, memorize them**); questions on pp 180-187; 16, 18, 20, 28, 30, 32, 34, 36, 40, 42, 46, 48, 52, 54, 60, 66, 70, 72, 92, 136 (20 questions)

Chapter 5: Gases; questions on pp 236-240; 44, 46, 48, 56, 68, 70, 84, 87, 90, 104, 108, 110, 111, 112, 113, 114 (16 questions)

You have 5 chapters to read and 84 questions to answer. Please space out your work load. Have a great summer!!