

Chemistry 120: List of Homework Problems

The list below includes all homework problems which you must complete as part of your studies. These problems come from the course textbook, Hein & Arena's *Foundations of College Chemistry, 12th Ed.* They all come from the sections marked as Exercises (Paired Exercises, Additional Exercises, or Challenge Exercises). If you are using an old edition of the text, you must still complete these problems from the 12th edition. You may use the textbook on reserve in the library as a reference.

Problems from Hein & Arena:

Chapter Two: 6, 8, 10, 12, 14, 15, 18, 19ceh, 20, 21cf, 22, 25-27, 36, 39, 52-54, 62, 63, 71, 73, 77, 78, 81

Chapter Three: 2, 6ab, 8ab, 10, 12, 14, 17-20, 23-25, 29, 31, 35 and

Chapter One: 1-6. Also, answer this question with a short paragraph: "There is a mistake in Figure 1.1 on page 3 which may confuse beginning students. What is this mistake? *Hint:* Look at the algae cells, then look at everything else."

Chapter Four: 2, 10, 12, 14, 16-20, 22, 24, 26, 28, 32, 34, 37, 43-45

Chapter Five: 6, 11, 12, 17-23, 36, 37, 40ab, 41ab

Chapter Ten: 2, 4, 10ae, 12, 13ab, 14cd, 16ab, 19abc, 21, 22, 30, 36, 39, 40, 52, 57, 63, 65

Chapter Eleven: 4, 6, 8, 14-16, 24, 26, 28, 30, 34, 36, 38, 40, 41, 43, 44, 52, 55-57, 59

Chapter Six: 1-24(all), 28, 30-33, 37, 39

Chapter Seven: 2behi, 4be, 6, 8ac, 12ac, 14, 16, 18, 20, 22ce, 26, 30bd, 32df, 34, 38, 44, 49, 51, 62, 63, 75

Chapter Eight: 2cd, 4, 8, 10, 14, 16abc, 24, 30, 32, 34, 36, 37, 43

Net Ionic Equations handout: 1-5, 7, 8, 12, 16, 17, 19, 21, 26, 29, 34, 37-40, 44-46, 48, 51a

Chapter Nine: 2, 4, 8-10, 12, 14, 16, 18cf, 20, 24, 27-29, 32, 36, 38, 40, 44, 45, 48, 50

Molarity handout: 1-8, 12, 13, 15, 18-20, 23, 25, 26, 34, 38, 39, 42, 44, 49, 51, 52, 55-58, 61, 72, 76, 81, 83, 87, 89

Chapter Twelve: 2a, 4ac, 6, 10b, 12, 14, 20-44(even), 48, 52, 54, 56, 63, 65, 66, 76, 82