**AP Chemistry Syllabus**

**Unit 1: Chapters 1 to 3**

**PLEASE NOTE:** Each individual assignment in the problem set should be done on its own piece of paper to get full credit. Don’t merge them together.

DAY TOPIC ASSIGNMENT

1 First Day. Study Ion List 1

Class Introduction for a quiz tomorrow

Hand out study sheets and review them briefly (formative)

A general guide for Chemistry Students

Good things to know

10 ways of study that work

Common mistakes to avoid

Follow the 4 steps of Problem Solving

Class information sheet

Go over class website

Hand out Ion Sheet

2 1.1 to 1.5 p. 33 / 10-15

Ion Quiz # 1 (quiz on List 2 is Friday)

Start PPT on Chapter 1

Introduction to Chemistry Ch. 1 Vocabulary

Scientific Method quiz on Thursday

Metric System (formative)

Numbers In Chemistry

3 1.6 to 1.10 p. 33 / 17-25 odd

p. 36 / 47-53 odd

Continue with Ch. 1 PPT p. 37 / 65-71odd, 72

Temperature p. 38 / 89-121 any 6

Density and Problem Solving Ion quiz # 2

Describing Matter Friday

An overview of the introductory labs. (formative)

4 2.1 to 2.7

Ch. 1 Vocabulary Quiz (formative)

Start with Ch. 2 PPT p. 73 / 16-24 any 3

Early History of Chemistry p. 76 / 65-68 all

Fundamental Laws p. 77 / 79-86 any 5, 88

Dalton’s Atomic Theory

Early work on the atom to the present

Molecules and ions

Introduction to the periodic table

5 2.8

Ion Quiz # 2 (quiz on list 3 is Tuesday)

Nomenclature

Practice worksheets

Using the periodic chart as a guide

6 2.8

Nomenclature

Continue with practice

Can work in groups half-way through

7 2.8

Ion Quiz # 3 (Ion Quiz # 4 on Friday)

Nomenclature

Continue from yesterday

8 Chapter 1 and 2 Review

Problem Set

Prepare for Formative quiz tomorrow

9 Chapter 1 and 2 Formative Quiz

10 Ion Quiz # 4 (Ion Quiz # 5 on Tuesday) p. 128 / 37-44 odd

Start Chapter 3 (PPT) 3.1, 3.2, 3.4

Counting by weighing and atomic masses

Use analogies and the use of ratios

Molar Mass (3.4)

11 3.3 and 3.6

The Mole

Mole Theory p. 129 / 51-56 all

Mole Calculations

Moles 🡨🡪 Grams p. 130 / 75-76

Moles 🡨🡪 Particles p. 130 / 81-83, 87-89

Percent Composition

12 3.7 to 3.9

Review Ch. 1 & 2 Formative from last week p. 131 / 99-102

Ion Quiz # 5

Empirical & Molecular Formula

Nature of a Chemical Reaction

Begin Balancing Chemical Equations

13 3.10

Stoichiometry with Limiting Reagent p. 132 / 112-120 all

Percent Yield

14 3.10

Stoichiometry with Limiting Reagent

Percent Yield

15 Review of Chapter 3 Material

Problem Sets and Worksheets

16 Test on Unit 1 🡪 Chapters 1 to 3

Sept. 4

**Lab Activities for Unit 1**

We are going to do a series of Lab Activities as well as some actual labs.

Remember that all Labs and Activities are summatives.

The Activities this unit are more general in nature. They are generally short and the skills that you will learn will help you all year.