



Chemistry AP Summer Institute

Instructor: Linda Ann Kruegel

Monday June 18, 2018

8:00 – 10:00 Chemistry: classroom

Welcome

Introductions

What do you hope to gain this week?

Equity and Access

AP Packet, binder, Acorn book, thumb drive

Handouts, plan on being flexible this week!

What's new at College Board?

10:00 (or so) Break

10:15- 12:00

A. What to teach? (let's look at the handouts and talk)

B. Exam: Part I: 60 mc's in 90min

Part II is now 1hr 45min. and 7 FR questions

Changes as of 2014.

C. Time Management: How much time do you need to spend
on each chapter/**Big Idea?**

- D. Have you submitted your course audit? (course description and Checklist are included in handouts.)

Three ways to accomplish this task:

1. Easiest and quickest: Use one of the approved audits that fits your needs and after the first year, resubmit your version.
2. Write one with a colleague (works if there is more than one teacher presenting the course in your district)
3. Feel free to write your own.

- E. Selecting Students:

1. Grades
2. Prerequisites
3. Student Interest
4. Class size/lab size
5. Student/Parent/Administration responsibility

- F. Teaching strategies / How do we get it all done and still have a life?

1. Textbook
2. Summer Assignments
3. Lab, lab notebooks (required), reports, cook-book vs investigative (guided inquiry: 6 labs done in this format, required!) Use of old AP questions.
4. Literature reviews
5. Research projects
6. Be willing to try new things (True Confessions)
7. What to do after the AP Exam?

- G. Preparing for the AP Exam

1. To take the test or not?
2. Skills and content
3. Review sessions
4. Review Texts: Hostage and Mueller, Barrons, Princeton Review, keep old tests and make your own. College Board on line reviews coming soon.
5. Mock tests: Practice makes perfect (use old /legacy AP exams)

- a. place old topic related FR questions on take home quizzes
- b. January mid-term: an old AP multiple choice test
- c. April: another old mc test and a FR from the past year, possibly using a lab period for each
- d. Have evening review sessions (after sports and club activities) dine together!

H. Lab prep for the pm session, how will you make labs Guided Inquiry? Let's practice!

12:00 – 1:00 Lunch

1:00 – 4:30 Lab: Bring your safety glasses and closed toed shoes!!

- A. Safety: prepare your students
- B. Lab #1 Determination % sulfate in an unknown sulfate salt (1997 exam)
- C. Lab #2 Finding the mole ratio of reactants in a chemical reaction (Flinn)
- D. Questions and discussions for the day
- E. Homework: Look at the AP lab book and pick your favorite lab

Tuesday 19, 2018

8:00 – 10:00am: classroom

- A. Did we miss anything yesterday?
- B. The Multiple choice exam: 50% of student's score
No calculators are allowed for the students. They are allowed the "cheat sheets."

10:00 – 10:15 Break

10:15 – 12:00

- A. Review answers to MC section.
- B. How did you do? Why did you take the test?

- C. What types of MC questions are important, I have a few to show you.
- D. Could you write mc questions...try a few for homework tonight
- E. Which of the GI Labs did you like the best?
- F. Lab Prep for this afternoon

12:00 – 1:00 Lunch

1:00 – 4:30 pm Lab

- A. Lab #3 Heats of Reactions(Merriweather)
- B. Lab #4 Determination of Keq for FeSCN^{2+} (Masterton and Slowinski)
- C. Lab #5 Kinetics lab
- D. Questions and discussions for the day.
- E. Homework: Read over the following labs: Electrochemical cells, Molar mass of a volatile liquid, Zinc plating lab

Wednesday, June 20th

8:00 – 10:15am Classroom

The Free Response Exam, Bring your calculators, Use the Equation sheets provided.
Work with your team.

10:15 – 10:30am Break

10:30 – 12:00pm

Free response Answers

Lab prep for pm session, (How do we make them Guided Inquiry)

12:00pm – 1:00 pm Lunch

1:00– 4:30 pm Lab

- Lab #6 Electrochemical Cells (Flinn)
- Lab #7 Molar mass of a volatile liquid
- Lab #8 Zinc plating lab
- Questions and Discussions for the day.

Homework: read over the following labs: Standardization of a base and determination of the molar mass of a solid unknown acid, Standardization of potassium permanganate solution and determination of % Iron in an OTC iron pill.

Thursday, June 21st

8:00 – 12:00 Lab

Lab #9 Standardization of Potassium Permanganate and determination of %Fe in OTC Iron Pills with potassium permanganate

Lab #10 Standardization of a Base and determination of the molar mass of an unknown solid acid (Masterton and Slowinski)

12:00 – 1:00 pm Lunch

1:00 – 4:00

Finish up labs, clean up lab!

Finish Free Response Questions

AP Central and AP Community

Gendreau and Greenbowe

Questions and Discussions for the day

Review topics of your choice

Questions and Discussions for the week

Closure, evaluations, and certificates

Thanks so very much for a super week. Please feel free to stay in touch via phone or email. Hope you do!!