**AP CHEMISTRY 2019-2020 Calendar** **Week 1: 08/12-16/17/2019**

**Unit 1 Atomic Structure and Properties**

*The chemical elements are fundamental building materials of matter, and all matter can be understood in terms of arrangements of atoms. These atoms retain their identity in chemical reactions.*

**Resources:** Text: Silberberg, Chapters 1-3, 5; [Online Textbook: Brown, LeMay CH 1-3,6-8](https://chem.libretexts.org/Courses/Lansing_Community_College/LCC%3A_Chem_151_-_General_Chemistry_I/Text/01%3A_Introduction_-_Matter_and_Measurement);

APChem Solutions (APCS) Notes; Class Website: <https://dherman.educatorpages.com/>

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| **Day** | **Agenda** | **Homework*****Due the following day unless specified otherwise*.** |
| Mon.8/12U-1C Day | Register studentsCollect Signed Contracts – ECStamp Summer AssignmentWelcome Power PointReference Packet – Review MMStart Homework - Prob 19***Quiz Multiplication/Division Facts*** | * Student Assignment Packet – See Class Website
* Start Set-Up of Binder According to Instructions – will have binder check at **end of unit.**
* Read and write Reflection on Notes: Quant Chem I
* Do Quant I prob 9,14,19,22 (use BSA Table)
* Particle Diagram WS
* Edpuzzle: Safety Video
* ***Note Quiz on Thursday – Summer Assign./Mental Math/Voc Wk1***
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| Tues.8/13U-1A Day | ***Collect Signed Contracts***Check and Review HWSummer Assignment Questions?Quant I Notes – questions?Mental Math Notes PP***Quiz Mental Math Kahoot*** | * Vocabulary Unit-1, Week-1 (see back of this calendar)
* Study on Quizlet
* Quant I prob 21,23
* Math Refresher Practice Problems WS

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| Wed.8/14B Day |  | * Edpuzzle: Melissa Maribel
1. Percent Composit. by Mass
2. Finding and Calc an Empirical Formula
* Preview Quant II Notes
* Quant II Prob 1
* Study for Thursday Quiz

*Need help with math facts – do Quizlet and Kahn Academy practice sets* |
| Thur.8/15U-1A Day | Review & Check HW***Quiz: Summer Assignment/ Mental Math/Vocab Wk 1***Lab Activity %Comp. of C in Sodium BicarbonateQuant II Notes  | * Reflection Quant II
* Quant II Prob 2,4,6,8,10,13,14
* Edpuzzle:
1. Calc Molecular Form - Melissa Maribel
2. Empirical Formula by Combustion Analysis
* [Suggested Reading from online Brown, LeMay 3.5](https://chem.libretexts.org/Courses/Lansing_Community_College/LCC%3A_Chem_151_-_General_Chemistry_I/Text/03%3A_Stoichiometry%3A_Chemical_Formulas_and_Equations/3.5%3A_Empirical_Formulas_from_Analysis)
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| Fri.8/16B Day |  | * WS Determining the Formula of a Hydrate Chem ***Prob 1***
* Review Pre-Lab Power Point: Hydrate (class website)
* Read Lab: Formula of a Hydrate, ***complete pre-lab***
* ***EdPuzzle***:
1. Empirical Formula of a Hydrate
2. Percent Composition by Mass lab
* ***If you were assigned Week 2 Vocabulary it’s due up on Quizlet by Monday***
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**Vocabulary- Unit-1, Week 1 – Study on Quizlet**

1. Matter
2. Element
3. Compound
4. Pure substance
5. Mixture
6. Nomenclature
7. Metal
8. Non-metal
9. Ionic compound
10. Polyatomic ion
11. Cation
12. Anion
13. Binary covalent compound
14. Mole
15. Stoichiometry
16. Limiting Reactant
17. %Yield

**Vocabulary- Unit-1, Week 2 – Study on Quizlet**

1. atomic mass unit (amu)
2. molar mass
3. law of mass conservation
4. law of definite composition
5. mass percent (also called: mass %, percent by mass, percent composition)
6. molecule
7. formula unit
8. empirical formula
9. molecular formula
10. structural formula
11. hydrate
12. actual yield
13. theoretical yield
14. significant figures
15. precision
16. accuracy
17. gravimetric analysis
18. combustion analysis
19. anhydrate (anhydrous)
20. desiccator (lab equipment)
21. crucible (lab equipment)
22. triangle (lab equipment)