**CHEMISTRY 2022-23 September 23, 2022**

**Today’s Agenda (Day 27)**

1. HOUSEKEEPING ITEMS

**🡪 \*\*CHEX MIX – 1 per team\*\*** 🡪 MONDAY!!

1. Homework Check:

🡪 Lab 3.3 – Dye Separation

🡪 Lab 3.2 – Properties of Water

🡪 Chapter 4 Practice Problems

🡪 Chapter 5 Vocabulary

1. Class Activity:

🡪 BEGIN: Chapter 5 PPT Review

1. **Section 5.1 – Light and Quantized Energy**
2. Section 5.2 – Quantum Theory and the Atom
3. Section 5.3 – Electron Configuration

HOMEWORK:

* READ: Chapter 5 – Electrons in Atoms
* COMPLETE: Chapter 6 Vocabulary
* STUDY: Chapter 5 Test

CHAPTER 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Amplitude | atomic emission spectrum | atomic orbital | Aufbau principle | de Broglie equation | electromagnetic radiation |
| electromagnetic spectrum | electron configuration | electron-dot structure | energy sublevel | Frequency | ground state |
| Heisenberg uncertainty principle | Hund's rule | Pauli exclusion principle | photoelectric effect | Photon | Planck's constant |
| principal energy level | principal quantum number | Quantum | quantum mechanical model of the atom | quantum number | valence electron |
| wavelength |  |  |  |  |  |

CHAPTER 6

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| actinide series | alkali metal | alkaline earth metal | Electronegativity | Group | Halogen |
| inner transition metal | Ion | ionization energy | lanthanide series | Metal | Metalloid |
| noble gas | Nonmetal | octet rule | Period | periodic law | representative element |
| transition element | transition metal |  |  |  |  |

REMINDERS:

* Chapter 5 Practice Problems – Sept. 27
* TEST: **Ch 5** 🡪 **Sept. 29**
* Chapter 6 Vocabulary – Oct. 11
* QUIZ: **Ch 5 & 6 Vocabulary 🡪 Oct. 13**
* TEST: **Ch 6 🡪 Oct. 18**

**CHEMISTRY 2022-23 PRACTICE PROBLEMS**

**CHAPTER 5 – Structure of the Atom**

**Practice Problems 5.1 –** Calculating Wavelength of an EM Wave



**Practice Problems 5.2 –** Calculate the Energy of a Photon

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**Problem-Solving Lab –** Interpret Scientific Illustrations



**Practice Problems 5.3 –** Filling Atomic Orbitals



**Practice Problems 5.3 –** Electron-Dot Structures

