**CHEMISTRY 2022-23 September 20, 2022**

**Today’s Agenda (Day 24)**

1. HOUSEKEEPING ITEMS

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1. Homework Check:

🡪 Lab 3.3 – Dye Separation

🡪 Lab 3.2 – Properties of Water

1. Class Activity:

🡪 QUIZ: **Ch 3 and 4 Vocabulary**

 **\*Go to** [**www.socrative.com**](http://www.socrative.com) **🡪 enter room “MSBCHEM2022” 🡪 enter ID #**

🡪DAY 2: Chapter 4 PPT Review

1. **Section 4.3 – How Atoms Differ**
2. **Section 4.4 – Unstable Nuclei and Radioactive Decay**

HOMEWORK:

* READ: Chapter 4 – The Structure of the Atom
* READ: Chapter 5 – Electrons in Atoms
* COMPLETE: Chapter 5 Vocabulary
* STUDY: Ch 3 & 4 Vocabulary Quiz, Chapter 4 Test

CHAPTER 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| chemical change | chemical property | Chromatography | Compound | Crystallization | Distillation |
| Element | extensive property | Filtration | Gas | heterogeneous mixture | homogeneous mixture |
| intensive property | law of conservation of mass | law of definite proportions | law of multiple proportions | Liquid | Mixture |
| percent by mass | periodic table | phase change | physical change | physical property | Solid |
| Solution | states of matter | Sublimation | Vapor |  |  |

CHAPTER 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| alpha particle | Atom | atomic mass | atomic mass unit | atomic number | beta particle |
| beta radiation | cathode ray | Dalton's atomic theory | Electron | gamma ray | Isotope |
| mass number | Neutron | nuclear reaction | Nucleus | Proton | Radiation |
| radioactive decay | Radioactivity |  |  |  |  |

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 |  |  |  |  |  |

REMINDERS:

* ~~QUIZ:~~ **~~Ch 3 and 4 Vocabulary 🡪 Sept. 20~~**
* Chapter 4 Practice Problems – Sept. 21
* TEST: **Ch 4 🡪 Sept. 22**

 **CHEMISTRY 2022-23 PRACTICE PROBLEMS**

**CHAPTER 4 – Structure of the Atom**

**Practice Problems 4.1 –** Atomic Number



**Practice Problems 4.2 –** Use Atomic and Mass Number





**Practice Problems 4.3 –** Calculate Atomic Mass

