

Quarterly #1: List of Topics: Chapters 1-6 & 24

Open Ended & Multiple Choice

Chapter 1

-Classification of Matter

Chapter 2

-Dimensional Analysis

-Significant Figures

-Density

Chapter 3

-Properties of Matter

-Physical/Chemical Properties and Changes

-Elements and Compounds

-Law of Definite Proportions (Constant Composition)

Chapter 4

-Atomic Structure

-Calculating protons, neutrons, electrons

-Foundational Laws of Atomic Theory

-Early Atomic Scientists and their Experiments

-Calculating average atomic mass

-Isotopes

Chapter 5

-Quantum Numbers

-Electron configurations (Aufbau, Hund's, Pauli)

Chapter 6

-Atomic Trends (1st Ionization energy, atomic radius, metallic character, electron affinity)

-Family names

-Effective nuclear charge

-Shielding

Chapter 24

-Alpha, Beta, and Gamma Emission

- Half-Life

-Fission vs. Fusion