

Study Guide for Exam 5 – The Atom and The Periodic Table

Required Materials:

- Scantron (#882)
- #2 pencil
- Scientific calculator

Optional Materials: Any handwritten note sheets.

Vocabulary

Atomic number	Quantum mechanical model	Isotopes
Mass number	Photons	
Atomic mass	Orbitals	

Calculations

1. Nanometers to meters
2. Wavelength to frequency of light
3. Frequency to energy for a photon

Concepts

4. Electron configuration
5. Periodic table: groups, periods, metals, nonmetals, noble gasses, most reactive, most nonreactive
6. Ionic charge of an atom
7. Be able to find the number of proton, electrons, and neutrons
8. Isotopic notation
9. Transition levels of electron and corresponding energy values
10. Relationship between color and energy
11. Models of the atom

Be prepared to answer questions on the following experiments

12. Atomic Spectra