**Study Guide**  
for Unit Exams in Chemistry A

Unit III: Atomic Structure

The following provides information about the content of this exam. Of course, any topic covered in the unit may be represented on the exam. Please use this sheet as a guide as you study. As always, let me know if you have any questions!

Exam Format:

* 21 Multiple Choice (3 points each)
* 9 True/False (2 points each)
* 2 Matching (4-5 points each)
* 2 Essay (5 points each)

Formulas to Know:

* E=hc/v

Material to Review:

* **Historical Figures** and their contributions to atomic theory**: Bohr, Boyle, Dalton, deBroglie, Democritus, Einstein, Heisenberg, Lavoisier, Planck, Rutherford.**
* Compare and contrast the three **subatomic particles** (protons, electrons, neutrons) in terms of **charge, mass, and volume**.
* **Atomic models**: early theories to current views
* **Atomic orbitals** and **sublevels** (s,p,d,f)
* **Electron Configuration**
* **Orbital Notation**

Terms to Know:

*(Make sure you can define and discuss each)*

* **Isotope**
* **Element**
* **Quantum Theory**
* **Nucleus**
* **Atomic number**
* **Mass number**