

PRE-AP CHEMISTRY LESSON PLAN
UNIT 02: ATOMIC THEORY AND THE STRUCTURE OF MATTER
SEPTEMBER 17, 2007 – SEPTEMBER 21, 2007

DAY	OBJECTIVE(S)	ACTIVITIES
MONDAY	1. Review the history of atomic theory.	UNIT DAY 1 1. Warm Up: Democritus vs. Dalton 2. Question/Answer: Isotopes of Pennies Lab 3. Lecture and Notes: Ions, electrons and charged atoms 4. Lecture and Practice: Electron configuration
	2. Review the calculation of average atomic mass.	
	3. Compare/contrast isotopes and ions.	
	4. Begin electron configuration identification.	HW: Atomic Structure HW, due Wednesday/Thursday
TUESDAY	1. Review the history of atomic theory.	UNIT DAY 2 1. Warm Up: Thomson, Rutherford and Millikan 2. Lecture and Practice: Electron configuration 3. Lecture and Notes: Periodicity and elemental properties
	2. Practice electron configuration.	
	3. Define and explore periodicity.	HW: Pre-Lab: Why do they call it a periodic table?
WEDNESDAY/ THURSDAY BLOCK	1. Review the history of atomic theory.	UNIT DAY 3 (90 min) 1. Warm Up: Mendeleev 2. Practice: Electron configuration 3. Lab: Why do they call it a periodic table? 4. Question/Answer: Electron configuration, periodicity, periodic table 5. Intro and Notes: Orbital Notation
	2. Analyze the organization of the periodic table.	
	3. Introduce Orbital Notation	HW: Post Lab due Tuesday.
FRIDAY	1. Review the history of atomic theory.	UNIT DAY 4 1. Warm Up: Bohr 2. Lecture and Practice: Orbital Notation 3. Intro and Notes: Quantum numbers 4. Demo: Fluorescence and emission spectra
	2. Use Orbital Notation to identify atoms.	
	3. Demonstrate light emission.	HW: Post Lab- Due Tuesday.