## STUDY PLAN

I plan to study using these techniques (practice problems, flash cards, having my parents quiz me, study group etc):	These are the things I will need to study with (book, notebook, etc):	I plan to come in and get help from Mrs. Farmer on these days:
These are some things that have worked well for me in the past when studying:	These are some things that I will try differently compared to how I have studied in the past:	I will know I am ready for the benchmark when:

## **EXAM #1 TOPICS** This is not a definitive list. This is just a suggestion to provide general guidance in studying.

**DIRECTIONS:** TOPICS IN NO SPECIAL ORDER. Rate each topic on a scale of 1-5 how well you think you understand it. 1 = "We learned this???" 5 = "I know this so well I could teach it to someone else!"

Topic #	Торіс	Nt.Bk Pg#	PRE	POST
1	Be able to describe and distinguish between the seven key Atomic Models that were covered in class. Key features, names, etc.			
2	Know what the ten scientists covered in class each contributed to the development of the atomic model.			
3	Convert numbers from scientific notation to standard notation, and vice versa.			
4	Convert metric units – KHDBdcm.			
5	Know what each metric unit represents – x10, x100, x1000, x1/10, x1/100, etc.			
6	Convert metric units and then put answers into scientific notation.			
7	Calculate for protons, neutrons, electrons for neutral atoms.			
8	Know the definition of atomic isotopes and why the periodic table masses are not whole #s			
9	Be able to calculate for protons, neutrons, and electrons for ions.			
10	Know the definition of a mole.			
11	Calculate molar mass.			
12	Perform single unit Dimensional Analysis problems.			
13	Perform double unit Dimensional Analysis problems.			
14	Convert from moles to grams, and vice versa.			
15	Convert from moles to particles, and vice versa.			
16	Convert from grams, to moles, to particles in one dimensional analysis setup, & vice versa.			
17	Know the definition of an orbital and how many electrons are allowed in an orbital.			
18	Know how many of each type of orbital are allowed in an energy level, and how many electrons are allowed in each of those orbital sets.			
19	Know how to apply Aufbau, Pauli Exclusion, and Hund's rules to orbital diagrams.			
20	Write an electron configuration with nothing but a standard periodic table.			
21	Know the definition of Atomic Absorption and Emission and evidence that an atom has undergone the processes.			
22	Rank the various colors of visible light from lowest to highest.			
23	Be able to use a set of data to identify an unknown metal by the emission spectra.			