 ***What is going on be on the Honors Physical Science exam on May 30th at 8:30am?!?!?!!?***

1. Unit 8 – Atomic Theory and Structure
   1. Scientists (Democritus, Dalton, Rutherford, Bohr, etc…)
   2. Atomic/Isotope structure (subatomic particles and nuclear notation)
   3. Calculating Average Atomic mass
   4. Electron Configuration (don’t forget exceptions!)
   5. Bohr Model calculations
2. Unit 9 - Classification of Matter and Periodic Trends
   1. Chemical/Physical changes and properties
   2. Mixtures/pure substances
   3. Periodic tables families (metals, nonmetals, etc.)
   4. Reactivity, atomic radii, ionization energy, electronegativity, ionic radii
   5. Lewis Structures (atoms AND ions)
3. Unit 10 - Chemical Bonding
   1. Nomenclature rules for ionic and covalent (know prefixes)
   2. Writing chemical formulas for ionic and covalent (given polyatomic sheet)
   3. Lewis dot structure of compounds
   4. Molecular Geometry (shapes!)
   5. Polarity (given electronegativity charts)
   6. Metallic Bonding
4. Unit 11 – Nuclear Chemistry
   1. 3 Types of Nuclear decay equations
   2. Fission/fusion
   3. Graphing and solving half-life
   4. Solving for mass defect
5. Unit 12 – Chemical reactions
   1. Calculating percent composition and empirical & molecular formulas
   2. Writing and balancing chemical equations
   3. Identifying types of reactions
6. Unit 13 – Stoichiometry and Quantitative Analysis of Equations
   1. Using solubility chart and activity series to predict products/write equations with state symbols
   2. Stoichiometry
   3. Calculating Limiting Reactants
7. Unit 14 – Stars and Solutions
   1. Life cycle of a Star and HR diagrams
   2. Calculating molarity and dilutions
   3. Reading solubility graph
   4. Saturated, unsaturated, and supersaturated solutions
   5. Factors affecting solubility
   6. Distinguishing between acids and bases
   7. Calculating pH

***How should I study?!?***

* First, start with topics you know you struggle with.
* Look over old tests—but take them over again! Quiz yourself. Don’t just skim over the test and expect to understand your mistakes.
* Redo old homework/practice problems. You’ll have to dust off some old skills we haven’t used in a little while!
* Rewrite old notes. Data suggests that *writing things down* is more likely to convert them to long term memory instead of just reading them!
* Start early. Set little goals for yourself each day leading up to the final. Starting to review the weekend before the final is *way too late*! (Although better than nothing…)
* You can do it!!! Work hard and stay focused… summer will be here before you know it—but work hard all the way till the end ☺

A+

Science final