

Directions: You will need your Coursework packets from each supporting target, a periodic table, a table of ions and a calculator with scientific notation. We have two full class periods for you to work through the review. On 6/10/16 we will use the iPads on our cart. On 6/14/16 we will be in the A-11 Computer Lab.

ALT4a Chemical Equations

1. Know the parts of a chemical equation (Lesson 1—pp 349-351 DO Exercises #1 and 4)
2. Practice chemical formulas and naming ionic compounds: <https://www.quia.com/quiz/1240133.html>
3. Watch a video on how to balance chemical equations [https://www.youtube.com/watch?v= B735turDoM](https://www.youtube.com/watch?v=B735turDoM)
4. Visit <http://education.jlab.org/elementbalancing/> and play the balancing equations Game

ALT 4b Chemical Reactions

1. Review the five types of chemical equations : <http://www.gpb.org/chemistry-physics/chemistry/605>
2. Review the Lesson 6 Notes handout What's Your Reaction?
3. Practice Predicting products with correct chemical names
<http://www.sciencegeek.net/APchemistry/APtaters/ReactionProducts.htm>
4. Take the Glencoe online quiz: <http://www.glencoe.com/qe/scienceOLC.php?qi=7389>
5. Review Scientific Notation with Tyler DeWitt <https://www.youtube.com/watch?v=7iGAa0BVS9I>
6. Practice more problems on back of Lesson 9 handout

ALT 4c Molarity and Mole Stoichiometry Problems

1. Review the Molarity POGIL handout.
2. Visit <http://ths.sps.lane.edu/chemweb/unit6/problems/molarity/> for practice molarity problems
3. Review your notes for Mole Ration NoteGuide_MoleRatio_GPB_801
4. Practice quiz on mole ratio calculations:
http://www.softschools.com/quizzes/chemistry/stoichiometry_mole_ratios/quiz1132.html
5. More Practice problems <http://www.chemteam.info/Stoichiometry/Molar-Ratio.html>

ALT 5 Thermodynamics

1. Review the first lab we did and revisit the definitions of endothermic and exothermic.
2. Know how to use bond energy tables to estimate the energy required to break bonds and the energy released when new bonds form (Quiz #2)
3. Know how to use bond energies to estimate the Net Energy Change for a complete combustion reaction. (Quiz #2)
4. Be able to label an energy diagram and determine if it shows the energy change for an endothermic or exothermic reaction process.

ALT 7 Inquiry

1. Review the Handout for Experimental design—be able to identify the Independent, dependent and controlled variables in an experiment.
2. Review the second page of ALT 5 Quiz #1 covering experimental design.
3. Be able to write a research question that relates the independent to dependent variable for an experiment.

ALT 8 Engineering

1. From Engineering Project: Design a Device to Measure Heat Transfer
2. Know the vocabulary of engineering design—criteria, constraints, prototype, iteration (design, build, test, modify, repeat until design meets the criteria and constraints)
3. Be able choose definition of the vocabulary word from several scenarios or phrases