Region 1 GEAR UP Agenda for July 2014

July – Day 1 (afternoon)

- Share your tns file with another person from a different school.
- Measurement Lab
- English to Metric Lab/Dimensional Analysis activity
- Polymer Gel Cube Controlled Expt. Lab
- Revisit Boyle's Law. (Learn how to transfer DQ data to L&S and then do linearization of data using L&S.)

July – Day 2

- Learn about different question types (checkbox, text match, numerical expression, image(point on), chemistry).
- Participants create a self test for Physical and Chemical Changes (two of each using multiple choice and checkbox) and share.

- Where is Heat? simulation
- Penny Lab

- Build an atom HS simulation
- Radioactive decay lab
- Radioactive Dating Game simulation
- Nuclear decay and chain reactions simulation

- Electron Configurations simulation
- Periodicity of Properties Exploration simulation
- Discuss ways of teaching electron configuration

July – Day 3

- Why Am I Charged simulation
- Light Me Up! simulation.
- Conductivity of Solution lab (NaCl, $CaCl_2$, NH_4NO_3)
- Writing Chemical Formulas simulation
- Participants create a tns file using covalent and ionic compounds and different question types beside MC (examples: checkbox, text match, and chemistry)
- Participants create a tns file for identifying molecular geometries (provide some jpg/png they can use)

- Charge a balloon and notice its effect on a stream of water (squirt bottle).
- Coke can demo (Charge a balloon with hair and use it to move an empty aluminum can.)
- IMF simulation - Intermolecular Forces
- Do IMF lab.

July – Day 4

- Create a tns file (using chemical equation tool)...give word equation and ask for skeleton equation (self check), then use tool to get balanced equation. Ask questions about mole to mole ratios afterwards.

- Solving Stoichiometry Problems simulation

- Google Form - What questions do you still have? (Answer during break.)

- Colorimeter Lab - CSI in the Operating Room Lab

- Conductivity probe with diluted salt solutions (Participants will be given a stock solution and will prepare diluted solutions that will be checked with a conductivity sensor. They will then prepare a graph of conductivity vs. concentration.)

- Physical Science: Energy: KE - Exploring Energy Transfer
- Hess' Law Lab

- Wrap-up: Address Google Form questions.
- GEAR UP wrapup (2:30-end)