You will select an element from the periodic table for study. Some elements which are very common to us will not be available for choosing. Refer to the restricted list below. Your goal is research a less-common element and present your findings in a well-written 400-500 word paper. Consider the following questions and topics in your work. (Your outline doesn't have to include this information in this order, but these questions/topics must be answered).

- Physical properties of the element
- Chemical properties of the element
- Element group and family name
- Any Isotopes? Allotropes?
- Historical information
  - Who discovered it?
  - Where was it discovered?
  - When was it discovered?
    - How does it fit in with our history of the periodic table?
    - Was its discovery influenced by another's work?
  - What are its uses?
    - In manufacturing?
    - Medical research?
  - What are its effects?
    - Reactivity with other elements?
    - Harmful effects?
    - Environmental effects?
  - Other interesting findings

This project will be completed in a sequence of steps. I will give more information on each step as the quarter proceeds.

**STEP 1** – Select an element from the periodic table and begin to READ about it. You can start with a simple Internet search for information, but note that this research alone will not be sufficient. Elements are on a first come/first served basis. No two students can select the same element. See me as soon as possible with your choice by Thursday, July 16.

**STEP 2** – Find other sources (besides a Google search) using your local library or the CSULA library (I'll give you more info on this soon)

**STEP 3** – Create an outline for submission (remember that the questions listed above do not have to be presented in that order, and you may include additional information). Due Thursday, July 30.

**STEP 4** – Write your paper and include a bibliography of sources. Include a picture or other visual of your element.

**STEP 5** – Submit your final copy for grading. Due Thursday, August 20.

**Restricted list of elements that cannot be chosen:**
H, He, C, N, O, Ne, Na, Al, Cl, K, Ca, Fe, Cu, Ag, Au, Pb, U