Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Elements Project**  
To help you learn more about a particular element and familiarize yourself with the Periodic Table of Elements, each scholar will be given an element to research. We will do most of the research during science classes by using the laptops in the classroom. The project will have both a written and a creative part. The written portion must be typed (12 pt., Times New Roman, 1.5 spacing). The art work at will be done at home, but if your research is completed in a timely fashion, then you may have some time during science in school. Each student will research a different element. **This project is due on Friday November 6tt, 2015.**

You may use paints, markers, cut paper, stencils, downloaded pictures, typed writing, and/or other materials to put the information on your element card. Make sure you are neat! (Use oak tag/poster board – 18” by 24”)  
  
Make use of the following sources to help you: **You are required to create a bibliography page siting your sources.** ***(That would be included on a separate final page)***

* Periodic Table of the Elements in the back of your planners
* Encyclopedia
* Books
* Reliable and accurate websites:
  + http://www.chemicool.com/
  + <http://www.webelements.com/atoms.html>
  + <http://education.jlab.org/itselemental/>
  + <http://chemistry.about.com/library/blperiodictable.htm>
  + <http://www.periodictable.com/>
  + <http://www.ptable.com/>
  + [http://www.infoplease.com/periodictable.php](http://www.infoplease.com/periodictable.php?id=27)
  + <http://www.rsc.org/periodic-table/>
  + <http://chemmac1.usc.edu/java/ptable/ptable.html>
  + <http://www.colorado.edu/physics/2000/applets/a2.html>
  + <http://theodoregray.com/periodictable/>
  + <http://www.chemicalelements.com/show/name.html>

**Writing assignment**

The description of the characteristics of your element should approximately 1½ to 2 pages. The element description will include (**each paragraph should include at least 6 sentences**):

**Paragraph one:** Introduction– What is an atom? What is an element? Make sure to address the relationship between an atom and an element. What is the periodic table? What is the name of your element? What is the chemical symbol? What is the atomic number and mass?

**Paragraph two:** History– What is the history of the element?You might include some of these topics: who discovered your element, when and where and how it was discovered, the importance of the element in the past.

**Paragraph three:** Element Properties– Describe the physical and chemical properties of the element. You might want to include some of these topics: Physical properties – the forms that they exist in matter (ex. Solid, liquid or gas) with descriptions of each form, the melting point, freezing point or boiling point of the element. Chemical properties– characteristics that determine how it will *react* with other substances or *change* from one substance to another. There is a lot more than you can include in this section.

**Paragraph four:** Uses of the element– Describe how your element is used. You might include some of these topics: one or more uses, how the element is manufactured, costs of using your element, importance of your element to economies throughout the world.

**Paragraph five:** Closing- One to two fun and interesting facts you have not yet discussed about your element. Also include what you have learned about elements in general so far based on your research.

The second part of this project is to create an element card for your specified element. You will be using your oak tag 18: by 24” to complete this portion.

1. 1. On the top center of the card, put the name of your element.\_\_\_\_\_\_\_\_\_\_  
     
   2. On the middle center of the card, in big letters, put the chemical symbol. \_\_\_\_\_\_  
     
   3. Place the following information on the left side of the poster:  
   · Atomic number \_\_\_\_\_\_\_\_\_  
   · Atomic mass \_\_\_\_\_\_\_\_\_  
   · State of matter \_\_\_\_\_\_\_\_\_  
   · Metal, Metalloid, or Nonmetal \_\_\_\_\_\_\_\_\_\_\_\_  
   · Number of protons, electrons, and neutrons \_\_\_\_\_\_\_\_\_\_\_\_  
   · Density \_\_\_\_\_\_\_\_\_  
   · Color \_\_\_\_\_\_\_\_\_  
     
     
   4. On the right side of the poster, put the following information:  
   \* Date of discovery \_\_\_\_\_\_\_\_\_\_\_  
   · Discoverer \_\_\_\_\_\_\_\_\_\_\_\_  
   · Natural or synthetic (man made) \_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   · Origin of name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   · Obtained from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   · Uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   · Other interesting facts about the element\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   · Picture/drawing of the element

Please make sure you fill your posters, we will be displaying it in the hallway for scholars and parent view. Please do NOT forget the bibliography section of the assignment.