**Element Project**

**Due Date – Thursday, Sept 22**

**Purpose:** Demonstrating knowledge of atomic structure by completing a characterization poster for an element.

**Procedure:**

1. **Sign up for an element** – You may select any element from the list that is not already taken. It is first come, first serve. You may not do the same element as someone else in your class. Make sure you write down which element you have signed up for.
2. **Select from one of the following projects create:**
   1. **Poster** – Should be done on poster board or foam board. At least 11” x 17” in size. Should not have visible tape and should not be done in pencil (colored pencil is okay for drawings).
   2. **Booklet/Brochure** – Should be neatly constructed, should not be done in pencil (colored pencil is okay for drawings), closed booklet should be at least 5.5”x 8.5” in size.
3. **Your project should included the following:**

• **Element name** – *the name of your element, this is what you wrote down when you picked an element*

• **Atomic number** – *can be found on the periodic table*

• **Atomic Symbol** - *can be found on the periodic table*

• **Average atomic mass** - *can be found on the periodic table*

• **Number of protons, electrons and neutrons**- *determine how many protons, neutrons and electrons an atom of your element has*

• **Lewis Structure** – *Provide the Lewis structure for your element, if it is a transition metal, then draw it with two dots.*

• **Group number** - *can be found on the periodic table* *(Hint: it’s a number between 1-18)*

• **Period number** - *can be found on the periodic table*

• M**etal, non-metal or a metalloid** - *can be found on the periodic table*

• **Name and formula of a compound the element can make** – *research your element and find different compounds your compound can make*

• **History of the element** – *Include a brief history of your element (like who discovered it, where it was discovered, when it was discovered, etc.) Should be at least 5 points of information.*

• **Boiling Point and Melting Point** – *include the temperatures at which your element boils and melts.*

• **Two other Physical Properties** – *Include at least 2 physical properties of your element that aren’t already included (ex. Color, state of matter, texture, etc.)*

• 2 **Common uses** – *Include at least two uses for your element in everyday life*

* **Pictures of your element** – include at least 2 pictures of your element or example of your element in every day life.

1. **On the back list:** your name and the class period.
2. **Creativity -** attractiveness, overall appeal and design counts for 10 points. Effort should be put into this project to make it look good.
3. **Neatness** – The poster/booklet should be organized, preferably typed (or printed neatly) and it should be easy to find the different pieces of information.
4. **This is a summative grade** (same as test grades)

**Grading Rubric for the Element Project**

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_\_\_\_\_**

Is your project the proper size? \_\_\_\_\_\_\_\_ (5 pts)

Is your project creatively done? \_\_\_\_\_\_\_\_ (10 pts)

Is your project neatly done? \_\_\_\_\_\_\_\_ (5 pts)

Did you include:

Name of Element \_\_\_\_\_\_\_\_ ( 5 pts)

Element Symbol \_\_\_\_\_\_\_\_ ( 5 pts)

Atomic number \_\_\_\_\_\_\_\_ ( 5 pts)

The Average Atomic Mass \_\_\_\_\_\_\_\_ ( 5 pts)

# of Protons, Electrons, Neutrons \_\_\_\_\_\_\_\_ ( 5 pts)

Lewis Structure \_\_\_\_\_\_\_\_ ( 5 pts)

Group Number and Period Number \_\_\_\_\_\_\_\_ ( 5 pts)

Metal, Nonmetal, or Metalloid \_\_\_\_\_\_\_\_ ( 5 pts)

Compound \_\_\_\_\_\_\_\_ ( 5 pts)

Element History \_\_\_\_\_\_\_\_ (10 pts)

Boiling Point and Melting Point \_\_\_\_\_\_\_\_ ( 5 pts)

Two other Physical Properties \_\_\_\_\_\_\_\_ ( 5 pts)

Common Uses and other info \_\_\_\_\_\_\_\_ (10 pts)

Pictures \_\_\_\_\_\_\_\_ ( 5 pts)

Sub-Total \_\_\_\_\_\_\_\_ (100 pts)

\_\_\_\_\_\_\_ Days Late \_\_\_\_\_\_\_\_ (-10 pts/day)

Total \_\_\_\_\_\_\_\_ (100 pts)