

Adopt-an-Element Project

You will have 5 full class periods Monday, November 11th – Friday, November 15th to research your chosen element and complete the assignments at each of the 3 levels. Please review the due dates & criteria for each assignment carefully. **If you are absent on November 18th, please email your report to mmyaklin@bluevalleyk12.org.**

My Element is _____ Atomic Number _____

Level	Due Date	Assignment Due	Max. Points	Completed?
1	Wednesday, Nov. 13 th End of Class	Completed Research Checkpoint	15	
	Monday, Nov. 18 th <i>Beginning of Class</i> - will accept on Friday, Nov. 15 th	LCD Informative Report Submitted	30	
		MLA Works Cited	15	
2	Friday, Nov. 22 nd <i>Beginning of Class</i>		25	
3			15	

Level 1: Required – LCD Informative Report – 60 points

LCD Informative Report Prompt: After researching from multiple websites and at least 1 book on your element, write an informative report that describes your element. Support your discussion with evidence from your research.

MLA Formatting: typed & double-spaced, no spelling or grammar errors, neatness, accurate information about your element

- 1 paragraph Introduction
- 3 paragraphs informing your reader about your element from your research
- 1 paragraph Conclusion
- At least 1 in-text citation
- 1 color picture of your element in its natural phase
- 1 picture of your element’s Bohr Model
- Works Cited attached to end of report (3 sources minimum - at least 1 book)

In-Text Citations and Works Cited Page Directions for Microsoft Word

1. Click on **References**
2. Make sure “**Style**” is “**MLA**”
3. Click on **Manage Sources**
4. Click **New**
5. Change **Type of Source** and fill in appropriate information.
 - a. Most likely you’ll choose: **Misc.** or **Document from a Website**
6. **Fill in the provided fields** as best you can. Whatever you don’t know or can’t find, leave blank. Click OK when you’re finished.
7. **Continue adding all of the sources** you used by repeating the above steps.
8. Read through your paper. Whenever you need to cite a source, click **Insert Citation** under the **Reference** tab. *This will automatically create a parenthetical citation for you. Citations should come at the end of the sentence and before the period.* See below:

We see so many global warming hotspots in North America likely because this region has "more readily accessible climatic data and more comprehensive programs to monitor and study environmental change . . ." ("Impact of Global Warming" 6).

At the end of your essay you’ll need to add a **Works Cited Page**. Do this on a separate page at the end of your essay. Click **Bibliography** on the **Reference** tab and choose the **Works Cited** option and your Works Cited page will be automatically created for you!

Level 2: Choose 1 from this level – 25 points – Due Friday, Nov. 22nd Beginning of Class

2a) Create a 3-D atom model for your element

- Protons and neutrons in nucleus with correct amount
- Electrons in correct energy levels and amounts
- Correct number of energy levels
- Correct sizes—protons and neutrons larger than electrons
- Color difference for each particle
- Labeled key on notecard attached (number of protons, neutrons, electrons)
- Neatness and effort

2b) Create a board game that reviews the concepts from our properties of matter unit

- Typed directions for the game
- 25 terms/concepts reviewed
- Typed Answer key
- Color & durable game board
- Neatness & Creativity

Level 3: Choose 1 from this level – 15 points – Due Friday, Nov. 22nd Beginning of Class

3a) Create a Crossword Puzzle (by hand or computer-generated) including 25 facts about your element and the other elements in its group/family. An answer key must be included as well as the blank version.

3b) Write and perform a song or rap about your element's researched information. You may perform live or submit a video. Song or rap includes most of your researched information and a typed copy of lyrics.

3c) Create a color advertisement poster (by hand or computer-generated) for your element including at least 25 facts about your element. Neatness & creativity are important. Bohr Model & Lewis structure are present.

3d) Create a cinquain poem about your element. Use the format below. (This is harder than it looks!)

Line 1:	one word - (subject or noun)
Line 2:	two words - (adjectives) that describe line 1
Line 3:	three words - (action verbs) that relate to line 1
Line 4:	four words - (feelings or a complete sentence) that relates to line 1
Line 5:	one word - (synonym of line 1 or a word that sums it up)

Element Research for _____

Must be completed by Wednesday, November 13th by the end of class

Chemical Symbol:
Atomic Number:
Average Atomic Mass:
Most common isotopes:
Number of Protons:
Number of Electrons:
Number of Neutrons (most common):
Group/Family Number:
Group/Family Name:
Physical Properties:

Number of Valence Electrons:
Number of Electron Orbitals:
Period Number:
Phase at Room Temperature:
Melting Point:
Boiling Point:
Density:
Cost: \$ _____ for _____
Classification? Metal / Nonmetal / Metalloid
Chemical Properties:

- Find a color picture of this element in its natural phase. Include it on your LCD report & cite your source.
- Find a Bohr model for this element at www.webelements.com. Include it on your LCD report & cite your source.

Person who discovered this element _____

The year and how it was discovered _____

Four uses for this element (Is it found in any household products, food, or medicines?)

1. _____
2. _____
3. _____
4. _____

List and describe two common compounds this element forms (if any)

1. _____
2. _____

**Make sure to explain why your element does *not* form any compounds if it doesn't

List two dangers to you or the environment

1. _____
2. _____

How common is this element on Earth? _____

Draw the Lewis Structure of this element here.

Draw the Bohr model of this element here. Include protons, neutrons, and electrons.

Five interesting facts about this element not already mentioned

1. _____
2. _____
3. _____
4. _____
5. _____

List all reliable sources you used for your research below. **At least one must be a book (can be an encyclopedia).** Use MLA format on your report. Research must include at least 3 sources.

EXTRA CREDIT (3 pts)

What is the origin of your element's name? _____

Describe the family of elements with which your element will typically bond.
