

NAME _____

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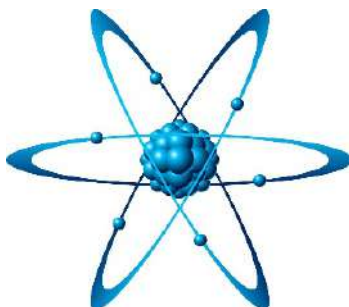
DUE DATE: **rolling deadline**

MAIL BOX _____

Hydrogen 1 H 1.0078

THE PERIODIC TABLE

Element Research Project



Progress Check - April 21
Rough Draft Complete - April 21

Deadline - May ??
Work Cited - April 28

SELECTING AN ELEMENT:

Elements to avoid: Elements with an atomic number greater than 86 with the exception of (92, 94, 95, 96). Finding information for your report may prove more challenging for some of these. No elements with an atomic number less than 20 as these were completed in 6th Grade. Repeat; do not pick the same element from 6th Grade.

RESEARCH:

You will be using research skills to learn about the element, describe its principle features, reactivity and common uses. Final project will include an **essay** with a length of no less than 250 words and a maximum of no more than 550 words, as well as an **creative visual** of the element and or how man utilizes it.

Where to start? You will be required to list no less than 3 technical academic sources.

PRINTABLE RESOURCES: NPMS Library Reference Desk (see my website for printable copies) or save tree and simply save documents to your school drive or Office 365.

1. *A Guide to the Elements* by Albert Stwertka link → <http://www.newpaltz.k12.ny.us/Page/9222>

Use the “Periodic Table or Table of Contents” to locate your element then read up on it.

Stwertka, Albert. *A Guide to the Elements*. Oxford University Press. New York, New York 2002

(This is the MLA format provided for your work cited list for this resource)

2. ONLINE RESOURCES: NPMS Library References List “find these links on Library pg too.”

→ <http://www.worldbookonline.com/wb/Login?ed=wb&subacct=F6287> ← hold Ctrl & click
(search engines) for articles.



Log-in ID: newpaltzms

Password: newpaltzms

→ <http://school.eb.com/levels> ← hold Ctrl & click



Log-in ID: npms

Password: learn

→ <http://discoverer.prod.sirs.com/discoweb/disco/do/frontpage> ← hold Ctrl & click



Log-in ID: NY5110H

Password: 12561

You are encouraged to use the above resources. You must find **3 article resources**. Note if you use these search engines you simply have to find the citation tab (then copy and paste it to work cited listed). No need for extensive lengthy, difficult formatting. **MLA format is provided just find the tab.**

If you choose to use a Google resource outside our Library, you'll need to build your MLA citation.
MLA FORMAT- How to build your citation for work cited list work sheet.

“Specific Article Title.” *Name of the Website*. Publisher, Date of Publication. Web. Date Viewed. <URL>.

NOTES: How to build your work cited list with MLA format for web resource?

Format:

“Specific Article Title.” *Name of the Website*. Publisher, Date of Publication. Web. Date Viewed. <URL>.

“Specific Article Title.”

Name of the Website.

Publisher,

Date of Publication.

Web.

Date Viewed.

<URL>.

Organize SOURCES: Store your article source citations here for now. (just cut and paste below)

1.

2.

3.

Essay Format Guiding Questions:

Remember, give your essay a creative **title**, and use this outline (P-1 means paragraph one, etc.):

Introduction P-1 Intro sentence gives the element's name and symbol:

Guiding
Questions

- What is the elements name and symbol?
- When it was discovered?
- What was your element named after?
- Who found it or (if found in antiquity, tell which tribe or nation was the first known to use the element.)
- What is the origin of the name and/or what scientist named it?
- Where it was discovered and where in the world it is found (geographical location)?

Answer a minimum of three questions with three sentences. (minimum three concrete facts) 5pts

P-2 Intro sentence gives the elements atomic number and atomic mass:

- What is the elements atomic number and atomic mass?
- Every element has its own interesting facts... mention some.
- Number of electrons, protons, neutrons, and how you know this (use atomic theorems from class packet)
- Does it have any known isotope(s)? What is the half-life? Discuss atomic mass of each?
- Is your element radioactive (unstable) and decay into other elements? Explain

Answer a minimum of three questions with three sentences. (minimum three concrete facts) 5pts

P-3a Intro sentence: Special characteristics can include physical properties, followed with:

- Some physical properties of your element.
- Explain what is meant by physical properties and why they are useful to science in general (or) specifically regarding your element. Then...
- In what state of matter it is found, (solid, liquid, gas, or solution) and if it is found in its pure form or in a compound.
- Discuss phase change temperatures; melting/freezing point, boiling/ condensation point, density, color, appearance, texture, odor, hardness, or any other physical properties you can find out about.

You do not need all these facts. For some elements, the color is unknown for instance and you might include that information here instead. (minimum three sentences and three concrete facts. 5pts

Optional ii - paragraph 3 (P-3b)

- Explain what is meant by chemical change (reactions) and why they are useful to science in general (or) specifically regarding your element. Then...
- Discuss the reactivity of your element.
- Give the names of compounds in which it is found, if it is found in compounds.
- What does it bond to or react with and what does it form? Is it an acid or base? What are the signs of chemical change when it reacts? Does it explode or give off light? Is your element useful to mankind for this reason and how?

You do not need to answer all these questions. Similar questions along this train of thought are perfectly fine. (minimum three sentences and three concrete facts.)

P-4 Intro sentence: what makes your element important?

- What makes your element important? Then elaborate...
- How does the element impact our economy?
- How has it furthered science?
- How does it effect the environment in which we live?
- If appropriate, describe one method for purifying the element, isolating it, extracting or mining it from the environment.
- Give some of the uses for it, a minimum of two, more if possible and elaborate on one.
- Give the economic importance of the element by explaining how the element is used.
- How would your life be different if this element was not available. Give specific reasons and exact details OR discuss what the world would be like without it.

Select TWO of the guiding questions for P-4 (minimum three sentences, minimum of two uses for the element and three concrete facts.)

5pts

Closing & conclusion P-5: Intro sentence - reiterate a fact from you introduction.

- When, how or who discovered your element? Then...
- What makes your element important?
- Make a prediction about what your element might be used for in the future... or
- Make a conclusion or closing argument about your question from P-4.
- Discuss what science might still uncover or discover regarding your element or simply the periodic table of element in general.
- What potential possibilities might lie in store for your element?
- How was it used in the past and how is it used today?

Consider these guiding questions for your conclusion. (minimum three sentences)

5pts

INTRODUCTION P-1 Intro sentence gives the element's name and symbol:

Answer a minimum of three questions with three sentences. (minimum three concrete facts) 5pts

P-2 Intro sentence: Intro sentence gives the elements atomic number and atomic mass:

Answer a minimum of three questions with three sentences. (minimum three concrete facts) 5pts

P-3a Intro sentence could discuss is it, an alkali or a metal, nonmetal, halogen, noble gas, etc.

Physical properties:

Minimum of three sentences with a minimum of three concrete facts) 5pts

P-3b Optional – Intro sentence could discuss is it, an alkali or a metal, nonmetal, halogen, noble gas. Is reactive as a compound in an acid or base?

Chemical reactivity:

Minimum of three sentences with a minimum of three concrete facts)

5pts

P-4 Intro sentence: How does the element impact our economy? **(or)**

How has it furthered science? **(or)** How does it effect the environment in which we live?

Select one of the guiding questions for P-4 (minimum three sentences, minimum of two uses for the element and three concrete facts.)

5pts

CLOSING P-5 Conclusion: Reiterate a fact from you introduction.

Consider the guiding questions for your conclusion. (minimum three sentences)

5pts

Final Essay – Formatting :

5pt

Title Page

Work cited

P-1 ← use paragraph headers “intro”

P-2

P-3a

P-3b

P-4

P-5 “conclusion”

Rubric “Check List”

Supplemental Poster:

DUE LATER

You can hand draw, find pictures from the computer or internet, or cut out pictures from magazines or newspapers to create your display of how the element is used in the real world. The size of the artistic rendition is to be 8.5 x 11 inches or 8.5 x 22 folded. It can be on white or colored paper, student’s choice. The final product must have in the upper right hand corner of the front page the student’s name.

On the back include name again, **period, due date and mail box number.**

1pt

REMEMBER: Give the poster an **interesting title!**

1pt

Items the collage/posted must include:

- Title 1pt
- Element box – name, symbol, atomic # and mass 1pt
- Atomic model of your element – this can be a print (from web) or hand drawn 1pt
- Minimum 2 images from the web (pictures of your element in the real world) that associates to P-4 from the research paper
1pt per image maximum 4pt
- Minimum 1 hand drawn “element” picture, diagram, chart, artistic piece 1pt
- Text – you must have 3 distinct facts on your display.
These facts need to be in a complete informational sentences or phrases, typed or written by you.
(try to include 1 fact from each paragraph) 1pt per fact max 5pt

Total – 15pts