

ICP PROJECT: ELEMENT RESEARCH (Ms. Young)

In chemistry, it is important to communicate what we know and learn in the field. For that reason, you will do a PowerPoint, Google Slide, or Prezi to demonstrate the information you know and learn about one particular chemical element.

This assignment will consist of researching your element, finding 25 facts about your element, and creating a PowerPoint, Google Slide, or Prezi to display the information you find. You may use books, textbooks, and/or the Internet. You will need to include at least 5 pictures of your element or pictures that relate to your element – one picture must be of the Bohr model of your element and another picture must be the Lewis structure of your element.

Your presentation will be shown by the teacher so your classmates can learn about your element.

Schedule for the project:

	Gray Day	Blue Day
Project is assigned	2/14/18	2/15/18
Research Data Sheet Due	2/21/18	2/22/18
Presentation due	2/27/18	2/28/18

Checklist of items: (check them off once you have completed them)

___ Data Sheet

___ Presentation

Rubric (Grading Scale) for the project:

25 points for Data Sheet

25 points for Presentation

- | | |
|--|---|
| <input type="checkbox"/> Element Name | <input type="checkbox"/> Element Symbol |
| <input type="checkbox"/> Atomic Mass | <input type="checkbox"/> Atomic Number |
| <input type="checkbox"/> Proton Number | <input type="checkbox"/> Electron Number |
| <input type="checkbox"/> Neutron Number | <input type="checkbox"/> Valence Electron |
| <input type="checkbox"/> Bohr Model (picture/illustration) | <input type="checkbox"/> Lewis structure (picture/illustration) |
| <input type="checkbox"/> 3 more pictures or illustrations | <input type="checkbox"/> 12 more facts about the element |

Bonus Points Opportunity for this project:

In lieu of making a PowerPoint, Google Slide, or Prezi presentation, you could complete your project on an apron, a t-shirt, or a ThinkPad skin. You could even make a superhero or supervillain. Remember the examples shown in class?

Possible Resource Websites:

<http://www.chemicool.com/>

<http://www.webelements.com/>

<http://www.chemicalelements.com/>

<http://periodic.lanl.gov/index.shtml>

<http://www.lenntech.com/periodic/periodic-chart.htm>

http://www.rsc.org/chemsoc/visualelements//pages/pertable_fl.htm

<http://education.jlab.org/itselemental/>

<http://environmentalchemistry.com/yogi/periodic/>

<http://www.corrosionsource.com/handbook/periodic/>

<http://www.heromachine.com> → If you are going to make an online superhero or supervillain, you can use this site at HOME! Remember, your superhero or supervillain must be clothed appropriately for school.

PICTURES, ILLUSTRATIONS, LANGUAGE (WORDS): All pictures, illustrations, and language (words) MUST be school appropriate! Every single picture and/or illustration and/or word. This includes but is not limited to any superhero or supervillain.

Element Research Data Sheet

Name _____

I. GENERAL FACTS

A. Terminology

1. Element Name: _____

2. Element Symbol: _____

B. Classification

1. Type: _____ (metal - nonmetal - metalloid)

2. Family Name: _____

3. Group Number (Column): _____

4. Period (Row): _____

C. Atomic Notation

1. Atomic Number: _____

2. Atomic Mass: _____

3. # of Protons: _____

4. # of Neutrons: _____

5. # of Electrons: _____

6. # Valence Electrons: _____

7. Bohr Model: (Draw it below.)

8. Lewis Structure: (Draw it below.)

PICTURES,
ILLUSTRATIONS,
LANGUAGE
(WORDS): All
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language (words)
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supervillain.

II. HISTORY

A. Derivation of Name

1. Language: _____

2. Word: _____ meaning _____

B. Discovery

1. Who: _____

2. When: _____

3. Where: _____

III. MAIN USES

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

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IV. PROPERTIES

A. Physical Properties

1. Appearance (Color, Texture, Hardness): _____

2. Phase (State) @ Room Temp: _____ (solid - liquid - gas)

3. Density: _____ g/mL

4. Melting Point: _____ °F = _____ °C = _____ K

5. Boiling Point: _____ °F = _____ °C = _____ K

6. Other: (something like ductility, malleability, solubility, flame test etc.)

B. Environmental Properties

1. Chief Source(s): _____ (name of rock/mineral)
(Obtained from)

2. Location of Chief Source _____ (name of country/countries)

3. Cost: _____ per 100 g (pure form)

4. Environmental or Health Concerns

V. UNIQUE/STRANGE FACT
