# ELEMENT SUPERHERO/VILLAIN PROJECT

# \*\*\*\*\*Assigned Monday, November 28th\*\*\*\*\*

**\*\*\*\*\*Project Due Date: Tuesday, December 13th by 2:30pm\*\*\*\*\***

**NO LATE PROJECTS WILL BE ACCEPTED!!!!**

**\*\*\*\*\*Presentation Date: You will be randomly chosen to present on**

**Thursday, December 15th; Friday, December 16th; Monday, December 19th, OR Tuesday, December 20th (If necessary)\*\*\*\*\***



**You have been hired by *Elements of the Universe*, a comic book** **publisher**, to create a new superhero whose appearance, characteristics and powers are based on your selected element on the periodic table.

***Directions:***

Students will complete/create the following items:

1. ***My Element Worksheet***
2. ***Element Superhero Illustration***
3. **A Written story about the superhero**
4. **A Brief presentation (3-4 minutes)**

Use the following websites to find out qualities ***(both physical and chemical)*** about the element you have selected:

<http://www.chemicalelements.com/> **(This site should be used to figure out how many electrons are in each shell)**

<http://periodic.lanl.gov/default.htm>

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

<http://www.uky.edu/Projects/Chemcomics/> ***\*\* has pictures if you need inspiration\*\****

1. **Element Super Hero/Villain Worksheet** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Use this worksheet to help keep track of your thoughts.

 \*\*\*You will turn this sheet in with your presentation-If you are doing a digital presentation, you may link this

 exact worksheet to your presentation\*\*\*

|  |  |
| --- | --- |
| Is it a superhero or a villain? |  |
| What is your character’s name? |  |
| What element gives the character its power? |  |
| Periodic Table Information | Element name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Symbol: \_\_\_\_\_\_Atomic Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Atomic Mass: \_\_\_\_\_\_\_\_\_\_\_\_Boiling Point (C): \_\_\_\_\_\_\_\_\_\_\_\_\_ Melting Point (C): \_\_\_\_\_\_\_\_\_\_\_\_\_Family:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ State at Room Temp: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Other Characteristics/Properties (at least 2 chemical properties)1. 5.2. 6.3. 7.4. 8. |
| How is the element used? | Uses (You must have at least 4):1. 3.2. 4. |
| What powers does your character have? How did he/she get those powers? |  |
| What are the strengths and/or weaknesses of his/her powers based on the properties of the element? |  |
| What does the character look like (think about the color and state of the element)? |  |
| How old is he/she? |  |
| Where is your hero live (where in nature)? Do they have a hideout? |  |
| Do they have an arch nemesis? |  |
| What additional elements could combine with your hero to make them more powerful? |  |

1. ***Element Superhero Illustration***

## This section should include a DRAWING (in color) of your Element Superhero/Villain on a clean sheet of WHITE paper—If you are doing a digital presentation, you may take a picture of your drawing and link it to your presentation.

***-Drawing must incorporate at least 5 of the characteristics/properties of the element. You will need to note the properties on the back of the drawing.***

***-Drawing must correspond to the qualities of your superhero. For example, if sulfur is your chosen element, the superhero’s uniform or hair or skin, etc. must be yellow since sulfur has a characteristic yellow color.***

1. ***A Written story about the superhero***

If you are doing a digital presentation, you may link it to your presentation.

 **PROPER FORMAT**

-TYPED 1 page story!!!! 12 font. Times New Roman. Single Space.

OR

-If you do not have a computer/printer available I will accept a **NEATLY,** handwritten

 2 page story. Single Space.

* + **Story must include 8 characteristics/properties of the element (at least 2 must be chemical properties)**
	+ **Describe where does your superhero element live (where in nature can it be found).**
	+ **What are his/her superpowers?**
	+ **Does your superhero element have a hideout?**
	+ **What are his/her strengths? What is his/her weakness?**
	+ **Who is his/her arch nemesis (evil super villain)?**
	+ **What additional element(s) could combine with your superhero to make him/her more powerful?**
	+ **Underline each property in your story**

**Examples of Properties:**

1. If your element has a high melting point, you might say that your super hero can move through fire to save others.

2. If your element is a gas, you might say that your superhero can sneak through a crack into a room.

3.  If your element explosively reacts with water, you might say that your super hero uses water to create explosions to stop his/her enemies.

1. ***A Brief presentation (3-4 minutes)****:*

You will use a visual aid (Video, Slideshow Presentation of at least 10 slides, You Dress Up, Poster, Dress Up a Doll, Prezi, Google Slides at least 10 slides, Etc..) to present your project to your classmates.

**YOU MUST INCLUDE THE FOLLOWING IN YOUR PRESENTATION:**

1. **TITLE: Creative name of superhero/villain. Name of your element and your**

 **elements ‘symbol and your Name.**

1. **Historical perspectives. This section should include a brief description of how**

 **your superhero acquired their element power. You must state somewhere**

 **WHERE,WHEN and WHO discovered your element/superhero. Find a**

 **picture of your discoverer, if WHERE, WHEN and WHO is unknown then**

 **state the approximate time when your hero was discovered/created. This is**

 **the person responsible for creating your hero/element.**

1. **DESCRIPTION OF ELEMENT SUPERHERO/ViILLAIN:**

**This section should include a brief description of what your superhero looks like and how he/she uses, or lives with their element power.**

**1. What is your element’s Boiling point, Freezing/Melting Point?**

**2. What is his/her atomic mass?**

**3. Atomic number?**

**4. What family is he/she in? Alkali metals? Alkali Earth? Transition**

 **Metals? Lanthanides and Actinides? Non-metal? Metalloid? Noble Gas?**

**5. What is the density of your superhero?**

**6. Is he/she malleable, ductile or brittle?**

**7. Is he/she a conductor of heat and electricity?**

**8. What's your superheroes’’ state of matter at room temperature (20**

 **degrees Celsius)?**

**9. What does he/she commonly combine with and/or what does he/she**

 **react with?**

**10. Is it highly reactive or non-reactive?**

**11. What does your element/hero look like?**

**12. Color?**

**13. What does it feel like?**

**14. Solid, liquid or gas?**

1. **Bibliography**

**A minimum of 3 resources included in your Presentation**

***Be Creative with your character and use your imagination!!!***

***What do I turn in?***

1. Element Worksheet

2. Element Superhero/Villain Drawing

3. Element Superhero/Villain Story

4. Presentation

\*\*\*EXTRA CREDIT\*\*\*\*

**Create a SIDEKICK (partner) for your Element Superhero/Villain. The sidekick should be another element that your original element frequently forms compounds with. EXAMPLE: If your Element Superhero is Captain Chlorine, a good sidekick would be Sodium Man!! *[Because Sodium (Na) frequently combines with Chlorine (Cl) to form NaCl.]***

**To receive the EXTRA CREDIT you must include the ELEMENT WORKSHEET, DRAWING, AND ONE PAGE STORY (If typed) or TWO PAGE STORY (If handwritten) of your sidekick. THE SIDEKICK INFORMATION MUST FOLLOW THE SAME GUIDELINES AS YOUR ORIGINAL SUPERHERO/VILLAIN.**

**\*\*\*\*\*THE TEACHERS WILL NOT PRINT ANYTHING FOR YOUR PROJECT!!!!! IF YOU ARE PRINTING ANYTHING FOR YOUR PROJECT, IT NEEDS TO BE DONE SOMEWHERE OTHER THAN AT SCHOOL\*\*\*\*\***