

The Periodic Table of Superheroes and Villains

For this project you will create a superhero or villain character based on the characteristics of an element of the periodic table. You should research an element to collect the needed information to complete this project.

Procedure:

- 1) Pick an element from the periodic table that will give your character power.
 - a. Element: _____
- 2) Research the properties of that element
- 3) Fill out the Project Chart and decide whether your character will be a superhero or a villain.
- 4) Write a short story (~1 page) about your character. The story should include:
 - a. Characters Name
 - b. Name of element that gives your character its power
 - c. A brief history of the element (when it was discovered and who discovered it)
 - d. Whether your character is a superhero or a villain
 - e. At least 8 qualities of your character (qualities can be physical and chemical)
 - i. Underline each quality in your story.
 - ii. Qualities that could be used: color, phase, reactivity, boiling point, freezing point, melting point, malleability, density, is it ductile, flammability, does it conduct electricity, explosiveness, size, hardness, and brittleness. There are many others that could be used!
 - f. Important uses of the element in the real world. (at least 2)
 - g. BE CREATIVE!
- 5) Draw and **color** a picture of your element character. Your picture should incorporate at least three characteristics of your superhero or villain.
 - a. The atomic number, atomic mass, and element symbol should be included in your drawing somewhere.
 - b. List out the qualities being depicted in your drawing on the back of the picture. Remember there should be at least three!
 - c. Make sure your picture corresponds to the qualities of your element.
 - d. Draw your picture on an 8 x 11 sheet of paper (a piece of computer paper would work great!

The Periodic Table of Superheroes and Villains Chart

Superhero or Villain?	
What is your character's name?	
What element gives your character power?	
Who discovered the element?	
What year was the element discovered?	
Periodic Table Information	Element Name: _____ Symbol: _____ Atomic Number: _____ Atomic Mass: _____
<u>Physical Characteristics of Element</u> What does your character look like? Think about color and state of the element at room temperature.	Physical Characteristics:
<u>Chemical Characteristics of Element</u> <ul style="list-style-type: none"> • What type of personality does your character have? Think about how reactive the element is. • What are your character's strengths/weaknesses? • What are your character's powers? 	Chemical Characteristics:

Periodic Table Project Rubric

<u>Chart</u>	Possible Points	Self-Evaluation	Teacher Evaluation
Superhero or Villain	1		
Character Name	1		
Element Name	1		
Who Discovered Element	2		
Discovered when?	2		
Periodic Chart Info	4		
Physical Characteristics	5		
Chemical Characteristics	5		
Real World Uses	4		
	Total: 25 Points	_____ /25	_____ /25
<u>Story</u>	Possible Points	Self-Evaluation	Teacher Evaluation
Basic Information (2 pts each) <ul style="list-style-type: none"> • Name • Superhero/Villain • Elements Name • Who discovered the element • When element was discovered 	8		
Character's Qualities: <ul style="list-style-type: none"> • At least 8 (2 pts each) • Includes both physical and chemical qualities (2 pts) • All relate to element (1 pt) • Appropriate qualities (1 pt) 	20		
Real World Uses: <ul style="list-style-type: none"> • At least 2 (2 pts) • Appropriate uses (1 pt) 	3		
Spelling	3		
Creativity ☺	6		
	Total: 40 Points	_____ /40	_____ /40
<u>Drawing</u>	Possible Points	Self-Evaluation	Teacher Evaluation
Periodic Table info included <ul style="list-style-type: none"> • Atomic number, atomic mass, and element symbol 	8		
At Least 3 qualities in picture and listed on back of paper	10		
Drawing corresponds with element's qualities	5		
Color and Creativity ☺	7		
	Total: 35 Points	_____ /35	_____ /35

Final Grade (Chart+Story+Drawing) : _____ /100