

Periodic Table of Elements Scratch Project

TASK: In this project, we will use the Scratch program to make an interactive learning tool for 10 elements of the periodic table. Each student may choose which 10 elements they are interested in learning more about for their project. For each element, you will need to make the letter(letters) of the element's symbol as a sprite and make a costume change as something that represents the element (ex. Au is gold and you could put a gold chain as the costume change). You will also be using the dialogue feature so the letter says "Hi, I am (element name), my atomic number is ____, and I am classified as a _____ (metal, metalloid, or non-metal) !" (ex. Hi, I am Gold, my atomic number is 79, and I am classified as a transition metal!).

Record in the table below which elements you will include in your project:

Element Symbol (ex. Au)	Element Name (ex. Gold)	Other costume image (ex. Gold chain)	Atomic Number (ex. 79)	Metal Classification (metal, metalloid, or non-metal)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Requirements for Scratch Project:

- At least 10 elements are included (10 sprites)
- Includes a backdrop (different from original)
- Each element symbol has two costumes (1. Symbol of element + 2. Image of element that represents something related to element)
- Each element has dialogue saying "Hi, I am _____(name of element), my atomic number is _____ and I am classified as a _____ (type of metal)!"
- Each sprite changes costume from symbol to image when you click on sprite
- Includes at least 1 of the following within the project (you can choose where)
 - Play a sound
 - Press a key
 - Glide around
 - Spin
 - Change size
 - Color clicker
 - Dancing letter

Grading Rubric:

Criteria	Yes?	No?	Total points (1 point each)
Includes at least 10 elements (as sprites)			
Includes at least 1 backdrop different from plain white backdrop on template			
Includes 2 costumes for each element (sprite) - 1 is the symbol, 1 is an image			
Includes dialogue for each sprite (saying "Hi I am _____, my atomic number is _____, and I am classified as a _____")			
Includes code "When you click on sprite" that makes costume change and dialogue to appear for 5 seconds			
Includes at least 1 color change letter using color clicker			
Includes at least 1 sound when letter clicked			
Includes at least 1 dancing letter			
Includes at least 1 change size letter			
Includes at least 1 press a key letter			
Includes at least 1 glide around letter			
Includes at least 1 spinning letter			
Bonus: Drawing your own letters/images			
Bonus: Upload or take your own pictures as the images			
Bonus: Show/Hide Sprites			
Total Points (out of 12 points)			

NAME of CREATOR: _____

NAME of GRADER: _____

ELEMENTS PROJECT - SCRATCH PEER REVIEW

Grading Rubric:

Criteria	Yes?	No?	Total points (1 point each)
Includes at least 10 elements (as sprites)			
Includes at least 1 backdrop different from plain white backdrop on template			
Includes 2 costumes for each element (sprite) - 1 is the symbol, 1 is an image			
Includes dialogue for each sprite (saying "Hi I am _____, my atomic number is _____, and I am classified as a _____")			
Includes code "When you click on sprite" that makes costume change and dialogue to appear for 5 seconds			
Includes at least 1 color change letter using color clicker			
Includes at least 1 sound when letter clicked			
Includes at least 1 dancing letter			
Includes at least 1 change size letter			
Includes at least 1 press a key letter			
Includes at least 1 glide around letter			
Includes at least 1 spinning letter			
Bonus: Drawing your own letters/images			
Bonus: Upload or take your own pictures as the images			
Bonus: Show/Hide Sprites			
Total Points (out of 12 points)			