

Name: _____ Section: _____



Periodic Table Project



One of the most important classification systems in science is the Periodic Table of Elements. Similarly, you probably have classification systems for many things in your life, such as your clothes, your books, your CDs, etc. For this project, you will apply your understanding of the Periodic Table of Elements and you will develop your own classification system for a collection of fifty objects of your choice. In other words you will create a Periodic Table of ...? Upon completion of your "Periodic Table" you will analyze trends in your system and compare your system of organization to the Periodic Table of Elements. Since this can be a difficult undertaking, you are permitted to work in groups of up to three students. Finally, the criteria by which you will be graded are attached and should be considered in order to receive the best possible grade.

Your table should:

- *consist of 50 objects of your choice
- *have a logical arrangement
- *be constructed on poster/display board (or you can create a computer based/interactive periodic table)
- *have a key
- *have a name (Periodic Table of ...)
- *be neatly put together
- *be creative
- *be free of spelling or grammatical errors
- *have all resources used, cited on the back
- *be analyzed to answer the project questions

It is important to recognize that **YOUR** periodic table does not have to look anything like the Periodic Table of Elements.

Periodic Table Project Questions

The following are questions that must be answered after completing your project. The answers must be typed and you should attach one copy to the back of your periodic table and have a second copy to be handed in with the rubric.

1. Describe the basis of your arrangement. (What unique characteristic(s) allows your objects to be arranged in their particular manner?)
2. What are the important features of your table?
3. How is your arrangement of objects similar to the Periodic Table of Elements? Explain. For example, you **could** discuss:
 - a. Do you have names for the rows or columns?
 - b. Are your objects arranged by mass/shape/color?
 - c. Can your table be divided into different groups?
 - d. Do the objects in your rows or columns have special or similar properties?
4. How is your arrangement different from the Periodic Table of Elements? Explain.
5. Mendeleev created a periodic table of elements and predicted characteristics of missing elements. Make a prediction about an object on your table that has not yet been discovered (the object will follow the last known one on your table). You should provide an actual example of the object and you should provide detailed reasoning for why this particular object will fit onto your periodic table according to your arrangement.

Name(s): _____

Section: _____

Periodic Table Project Grading Rubric

Component	Exceptional (20-16 Points)	Acceptable (15-11 Points)	Marginal (10-5 Points)	Points
Logical Arrangement	Objects are arranged in a unique, logical arrangement where no two objects can occupy the same place	Objects are arranged in a logical way; however, some objects can occupy the same place due to the arrangements simplicity	Objects are not arranged in a logical way or the arrangement is extremely elementary	
Component	Exceptional (5-4 Points)	Acceptable (3-2 Points)	Marginal (1-0 Points)	Point(s)
Key	The key accurately and clearly provides information on how to understand and interpret all aspects of the periodic table	The key provides information on how to read the periodic table, however it is not 100% clear and may contain a few errors	The key does not accurately or clearly provide information on how to read the periodic table	
50 Objects	The project is composed of 50 objects	The project is composed of close to 50 objects	The project is missing a substantial number of objects	
Name	The project has an appropriate title that describes what it is composed of	The project has a title but it could be revised to better describe the objects it is composed of	The project has a title that does not properly describe the objects it is composed of	
Neatness	Extremely neat and meticulously constructed; project appears to have taken a lot of time and effort	Neatly put together, but does have the potential to be neater	Messy project that appears to have been completed at the last minute	
Creativity	Was extremely clever and composed with originality; uniquely made project	Added a few original touches to enhance the project	Little creative energy used during this project	
Directions	Directions were followed completely and thoroughly	Most directions were followed, however a few components were missing	Directions were not followed and many components were missing	

Mechanics	The project has no misspellings or grammatical errors	The project has 1-2 misspellings or grammatical errors	The project has 3 or more spelling or grammatical errors	
Work Cited	Resources used for the project are all properly cited according to the appropriate formats	Resources used for the project are cited however they contain a few formatting errors	Resources used to gather information for the project are poorly cited	
Presentation	The project was presented in an enthusiastic, informative, and thorough manner	The project was presented in an informative manner	The project was presented in a lackluster and non-informative manner	
Question 1 Answer	A clear and thoroughly written description of the project's arrangement	A basic description of the project's arrangement that provides an idea of how it is arranged	A poorly written description of the project's arrangement that does not provide an adequate understanding of its arrangement	
Question 2 Answer	A clear and thoroughly written description of the projects important features	A basic description of the projects important features	A poorly written description of the projects important features	
Question 3 Answer	A clear and thoroughly written description of how the project is similar to the Periodic Table of Elements	A basic description of how the project is similar to the Periodic Table of Elements	A poorly written description of how the project is similar to the Periodic Table of Elements	
Question 4 Answer	A clear and thoroughly written description of how the project is different from the Periodic Table of Elements	A basic description of how the project is different from the Periodic Table of Elements	A poorly written description of how the project is different from the Periodic Table of Elements	
Question 5 Answer	A clear and thoroughly written description of the next object to appear on your table followed by detailed supporting facts	A basic description of the next object to appear on your table and your reasoning	A poorly written description of the next object to appear on your table without providing your reasoning	

Total - /90

Additional Comments:

