

Investigating the Periodic Table

The periodic table is a helpful tool used by scientists and students to find the structured sequence which identifies an element. With practice you can determine information such as: number of protons, number of neutrons, number of electrons, valence electrons, the electron configuration, the number of shells, atomic number, mass number, atomic mass number, whether the element is a metal, non-metal, or metalloid, whether the element is a solid, liquid, or gas, how reactive the element is, the physical and chemical properties of the element, the chemical bonding possibilities of the element, and more.

Your Task:

1. Choose an element between 1-90 you want to research and follow the assignment guidelines.
2. Use at least three sources to obtain your information.
3. Present your project to the class
 - a. Poster presentation
 - b. Technology based presentation such as Google, Prezi, or any web based presentation tool.

Assignment Guidelines:

Your poster should include: (10 points)

1. Element information: (8 pts.)
 - a. Name
 - b. Symbol
 - c. Atomic number
 - d. Atomic mass
 - e. Number of Protons, Neutrons, Electrons.
 - f. Number of known isotopes
 - g. Group and period number
 - h. Physical and Chemical Properties
2. Diagrams of your Element: (2 pts)
 - a. Bohr Model showing electrons in energy levels around the atom
 - b. Dot diagram showing the electrons in the outer most energy level.

Your oral presentation should include: (20 points)

1. A written report including: (10 pts.) Turned in to Turnitin.com by _____
 - a. Who discovered it?
 - b. Where and when was it discovered?
 - c. What are its uses?
 - d. Works Cited. Use easybib.com.
2. A 2-5 minute presentation of your element. (10 pts.)

Useful web sites:

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

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

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

<http://www.easybib.com>

- We will be doing research in the computer lab on _____. Bring a flash drive to save your notes and images. You can also use google docs if you have a google account.
- We will be going to the computer lab to work on the paper/presentation on _____.
- My presentation date is _____.
- My paper is due on turnitin.com by _____ at midnight.

Go to web sites and take electronic notes. Copy and paste what you want into a word document. **DO NOT PRINT EVERYTHING!** Don't forget to copy and paste the web address to cite later.

Open a folder on the desktop to save images. Right click on an image to save. Later you can browse the images and decide which ones you want to include on your poster or presentation.