

# Atomic Model & Research Project

## What to Do

Students will choose an element they wish to research from the periodic table using the list provided by me. (CHOSEN IN CLASS). You will be able to present the required research in the form of a creative brochure. Finally, create a free-standing model of your chosen element (atom). Be creative when you present the model of your chosen element (atom).

**Part 1:** Atom Research Project: You will be able to present the required information for your project in the form of a **Brochure**. Write information in full sentences. Information must be presented creatively. Make sure you have name, date, SLEs, CCSS, and power standards. Please refer to the requirement list often when completing your written section. **The report is worth 60 points.**

**The brochure must be colorful, neat, and contain the following required information:** element name, element symbol, atomic number, atomic mass, picture of energy level of atom, periodic table location, melting point, boiling point, natural state of the element (solid, liquid, gas), density, physical appearance, type of element, origin of element's name, name of person/persons who discovered the element, date of discovery, picture of scientist/s who discover it, five common uses of element, picture of how is used, seven interesting facts about the element, picture of element fact, four pictures of you and your partner building atom model, name of both partners, due date, SLEs, power standards, and CCSS.

See attached brochure template to see how to place the information on the brochure. You will be creating 2 pages, which will ultimately be glued back-to-back, resulting in a tri-fold brochure with a total of 6 panels.

You may use the internet (see websites listed below), science books, or other reference sources. **DO NOT USE WIKIPEDIA-YOU MUST USE RELIABLE SOURCES. CHECK YOUR INFORMATION!!!!**

### **Element Internet Websites:**

<http://www.webelements.com/> -interactive table

<http://www.periodictable.com> -interactive table, shows you what elements look like

[www.chemcool.com/](http://www.chemcool.com/) -interactive table

<http://chemistry.about.com/library/weekly/aa030303a.htm> -helps with who is credited with discovering the element, and the date of discovery

<http://periodic.lanl.gov/index.shtml>

[www.chemicalelements.com](http://www.chemicalelements.com)

[www.chem4kids.com/files/elem\\_intro.html](http://www.chem4kids.com/files/elem_intro.html)

**Part 2:** Build a free-standing **3D model** using the Bohr model.

Requirement

1. Your atom model should be 3-Dimensional and include protons, neutrons, and electrons in the appropriate locations.
2. You need to label all particles (protons, neutrons, and electrons).
3. Make sure protons and neutrons are the same size and electrons are smaller.
4. Maximum model dimensions: **3 ft. x 3 ft** (Projects need to fit in classroom).
5. Decorate your atom model creatively (Be unique and colorful).
6. A suggestion for what the model of a 3D model of atom looks like.
7. **The model is worth 40 points.**
8. **Due Date Check Web Calendar.**



**Good Luck & Have Fun!!!!**