

Atom Model and Pamphlet Project

Physicist: _____

Element assigned: _____

Due Date: _____

Goal: To create an informational pamphlet about an element and a three-dimensional model of an atom.

Pamphlet

The pamphlet should be designed to **promote** the element by including the information listed below.

I. Description and physical properties:

- A. Atomic Number
- B. Atomic Mass (amu)
- C. Density (g/cm^3)
- D. Melting point ($^{\circ}\text{C}$)
- E. Boiling point ($^{\circ}\text{C}$)
- F. What it looks like (Is it a solid, liquid or gas? Color?)

II. History

- A. Origin of name (language it came from and meaning)
- B. Who discovered it
- C. When was it discovered
- D. Where was it discovered



III. Uses

- A. List some uses for element
- B. Where is it found on earth
- C. Is the element found in living things
- D. Two interesting facts about the element
- E. Include a picture of one of its uses

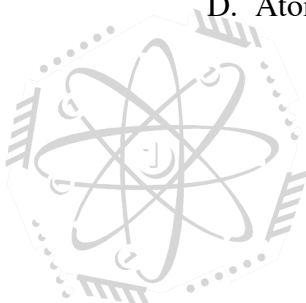
IV. Atomic Structure

- A. Bohr representation of the atom – label all parts (proton, neutron and electron)
- B. Actual picture of the element

V. Periodic Square (information from the periodic table)

- A. Atomic Number
- B. Element Symbol
- C. Element Name
- D. Atomic Mass

A	→ 6		
		C	← B
C	→ Carbon		
		12.01	← D



Additional Required Items:

- ❖ Cite sources (3 required, at least one printed material)
- ❖ Design a cover (use color, drawn or printed)

Atom Model

You will construct a model of an atom of the same element that you have researched.

Requirements (Use the following as a checklist)

- I. Model must have a nucleus of protons and neutrons**
 - a. Protons and neutrons must be distinct separate particles.
 - b. Nucleus size should be as small as possible
 - c. Do **NOT** use a Styrofoam ball for a nucleus.
- II. Model must have proper number of electron energy levels and proper number of electrons within each energy level**
- III. Model may not be constructed of any soft fruit or pulpy material that drips or rots**
- IV. Must have string or cord above to hang it from ceiling**
- V. Must have string or cord from which to hang a card with the following information:**

- A. Atom Name: _____
B. Atomic Number: _____
C. Atomic Mass: _____
D. Number of subatomic particles:
a. Protons: _____
b. Neutrons: _____
c. Electrons: _____

Make a color coded key for the particles

Name of student, Period number

Front of Card

(Periodic Square, for example...)

1
H
Hydrogen
1.00794

Back of Card

Grading

PAMPHLET

Completion of research	10 pts
Design and layout	10 pts
Neatness	5 pts

Extra Credit given for creativity

ATOM MODEL

Accuracy	15 pts
Presentation of card	10 pts

Extra Credit given for creativity

