

(75 points)

You are going to choose an element from the Periodic Table and construct an atom. There are two parts to completing this project:

1. You are to make a model that represents your atom
2. You are to write a short report describing the properties and uses of your atom.

Your completed project must contain the following:

Model:

1. Choose an element from the periodic table with an atomic number higher than 7.
2. Construct a 3-dimensional, freestanding or hanging model.
3. Must contain the proper number of protons, neutrons, and electrons.
4. Subatomic particles must be located correctly in the nucleus or the proper electron energy levels.
5. Make a Key that includes:
 - a. The name of your element
 - b. The atomic number of your element
 - c. The mass of your element
 - d. What material you used for your protons
 - e. What material you used for your neutrons
 - f. What material you used for your electrons.

Suggestions for materials: It is encouraged to use cheap, easy to find materials such as wire, Styrofoam balls, beads, packing peanuts, toys, noodles, wire hangers, clay, gumballs, no perishable food, but candy is acceptable.

Short Report:

Paragraph #1: Element name, symbol, atomic number, # of protons, neutrons, electrons, energy levels, and atomic mass.

Paragraph #2: Discovered by? When? Where did your element's name come from?

Paragraph #3: Descriptions of physical and chemical properties of your element:

- boiling point and/or freezing temperature (physical property)
- in its natural state, it is a solid, liquid, or gas? (physical property)
- what does your element react with? What compounds might your element often be part of? (chemical property)

Paragraph #4: Description of how your element is used. Any health effects?