Due Feb 8

Name: _____

Element: _____

Model of an Atom

You will make an atom model for one element on the periodic table. You should use common household and/or craft materials to create atom parts such as protons, neutrons, and electrons.

Use any material as long as it's safe and within reason. Try to use things you find around the house.

Because there are several elements with extremely high atomic numbers, you should complete one of the elements listed below for your model. Please see me if you would like to complete this project on another element.

Lithium	Boron	Argon	Sodium	Aluminum	Helium
Carbon	Neon	Magnesium	Nitrogen	Calcium	Phosphorus
Chlorine	Potassium	Oxygen	Sulfur	Fluorine	Silicon

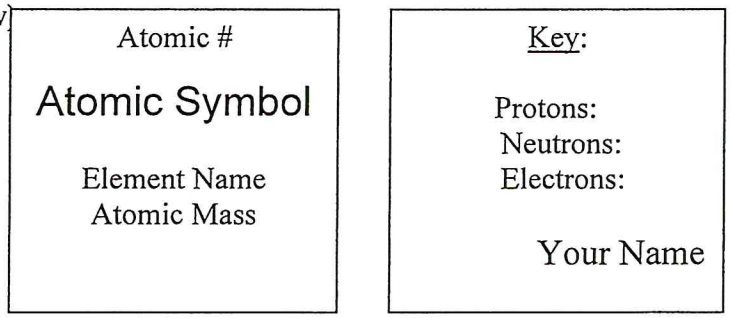
Basic Guidelines & Expectations:

1) The size of your model should be about the **size** of a baseball up to a basketball.

2) Your model should use **different colors and/or types of materials** to represent each of the 3 major subatomic particles (protons, neutrons, and electrons). If you use beads to represent the protons, you should use a different material/color to represent the neutrons, and a third to represent the electrons.

3) Your model should have the **correct** number of **electrons**, **protons**, and **neutrons** present. Use a periodic table.

4) Your model must also include an **attached** information tag that <u>clearly</u> identifies the following (as shown below



5) You will need to do research either on the internet or in a book to determine the positions of electrons for your element.

6) Be **creative** in your use of **materials** and **construction**.

Name _____ Class _____ Element _____

ATOM MODEL SCORING RUBRIC

This rubric will be used to assess your atom model and information card. This rubric should be used to guide your construction of your model and should be handed in with your model.

MODEL ACCURACY		MODEL CREATIVITY		DESIGN/MATERIALS		INFO CARD DESIGN
4: The number of protons, neutrons and electrons are correct.		4: The model includes at least 3 different materials and is very neatly crafted and organized.		4: Well-constructed, demonstrates creative use of materials, and is a correct size.		3: The information on the card is very organized, easy to read and clearly identified/labeled and correct
3: There is an error in ONE of the atom particle totals.		3: The model includes at least 2 different materials and is neatly crafted and organized.		3: Generally well-constructed, creative use of materials, and is correct size.		2: The information on the card is generally organized, readable and labeled. Errors are minimal.
1: There is an error in TWO of the atom particle totals.		1: The model includes at least 1 different material but lacks creativity or organization.		1: Construction, OR use of materials, OR size does not meet expectations.		1: The information card is lacking in one of the above areas. There are errors in card.
0: All three atom particle totals are incorrect.		0: Serious lack of creativity or organization. Model does not use any materials.		0: Overall failure to meet expectations; haphazard material use and lack of effort is evident.		0: The information card is not organized, not easy to read and not clearly labeled.

TOTAL POINTS = _____/15