Read and complete based on the model you made.

1. Your atom represents the element _____.

2. It has an atomic number of _____.

3. Describe how you made your model. (5 points)
   - Explain which materials you used and why you used them.
   - You should also explain how you determined the amounts of protons, neutrons and electrons for your atom.
   - Finally, explain why you placed materials in certain locations of your model.

4. In which of the three main categories of elements is your atom located?

5. In which group is your atom located?

6. Name two other elements that share similar properties of your atom.

7. Based on the main category of your atom, list at least two physical **or** chemical properties your atom should have.

8. How many valence electrons does your atom have? _____
Describe how the valence electrons affect the reactivity of your atom:_____

Bonus Questions: (+2 pts each)

Identify the following elements based on each set of clues:

It is a solid at room temperature
It is shiny
It is very strong, but lightweight
It has similar properties of Zr but has a smaller atomic mass.

It is a solid but does not have metallic properties
It does share similar properties of Cl
It is often used to disinfect wounds, or skin before surgery
Its isotope 131 is used to treat thyroid problems