**(Optional) Bohr Model Project**

**Objective:** To create a physical 3-D model of a Bohr model for an atom with atomic # 5-18.

**Details:** You are going to be making a model of a Bohr atom, be creative! You can make it out of whatever materials you like; anything from poster board to wood to Styrofoam to *whatever you want!*  This will be a 30 point project. On the project you must represent the protons and neutrons in the nucleus, and the surrounding electrons on the correct orbitals.

**Grading**:You will be graded in **3** areas:

1. Creativity (10 points): This will be based on the idea you choose, did you just draw it on poster board or did you spend time on making a crazy pirate-space-ship piloted by neutron and proton monkey bandits, being surrounded by electron force-fields all made out of modeling clay and aluminum? (This would be a little over the top).
2. Professionalism (10 points): Does you model look nice and neat? Is it easy to look at and find all of the subatomic particles? Does it look like you spent time on this or does it look like you just threw it together in 10 minutes?
3. Accuracy (10): Is your model atomically accurate? Do you have the number of electrons, protons and neutrons correct? Are the electrons on the appropriate energy level (2n2)?

**Due Date:** *September 24th & 25th*

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **BOHR MODEL PROJECT RUBRIC**

|  |  |  |
| --- | --- | --- |
| Creativity | Professionalism | Accuracy |
| Original idea, clearly 3D model with own personal flair. Not an over-used “theme”**10** | Project is neat and organized, easy to determine protons from neutrons, clearly spent time on project**10** | Correct number of shells, protons, neutrons, and electrons, subatomic particles are in correct spots**10** |
| Used an idea give in class (i.e Styrofoam balls), executed it well, clearly 3D**8** | Project is mostly neat and organized, easy to determine protons from neutrons, clearly spent time on project**8** | One mistake on subatomic particles**8** |
| Used an idea from class but wasn’t executed well or wasn’t clearly 3D**6** | Project is not very neat and organized, difficult to determine protons from neutrons**6** | 2-3 mistakes on subatomic particle**6** |
| No original parts, not 3D. clearly did not put any thought into project**4** | Project is not neat at all, very difficult to see actual model. Looks very messy**4** | 4 or more mistakes on subatomic particles**4** |

 Total:\_\_\_\_\_/\_\_30\_

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**Due Date:** *September 24th & 25th*

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