**History of the Atomic Model (Presentation Rubric)**

**M4 I can explain that atomic models are not perfect, but can help us learn about atoms and their characteristics.**

**M5 I can describe how models showing the structure of matter have changed over time.**

INTRODUCTION: Your goal is to create a presentation (PowerPoint, Prezi, etc.) that you could use to explain to someone else how our understanding of the model of the atom has changed over time. Use examples from our previous lessons, the Yostscience weebly, and anything else you can find on the Internet (\*just make sure it is a good source).

What you need to include in your presentation:

|  |  |  |  |
| --- | --- | --- | --- |
| **Scientist** | **Information** | **Points Possible** | **Points Earned** |
| **Summary** | --Describe in your own words how the model of the atom has changed over time. (\*At least 3 sentences) (Include words such as: subatomic particles, electrons, nucleus, and protons)--Today’s accepted atomic theor--Explain WHY we used models of atoms. | * 3 points
* 4 points
* 3 points
* 1 point
 |  |
| Democritus | * A picture of Democritus
* Approximate year he made his discovery
* Describe how his model is both accurate and inaccurate.
* A picture of his atomic model
 | * 1 point
* 1 point
* 2 points
* 1 point
 |  |
| John Dalton | * A picture of Dalton
* The year he made his discovery
* Describe how his model is both accurate and inaccurate.
* **SUMMARY OF HIS ATOMIC THEORY**
* A picture of his atomic model
 | * 1 point
* 1 point
* 2 point
* 3 points
* 1 point
 |  |
| J. J. Thomson | * A picture of Thomson
* The year he made his discovery
* Describe how his model is both accurate and inaccurate.
* A picture of his atomic model
 | * 1 point
* 1 point
* 2 points
* 1 point
 |  |
| Ernest Rutherford | * A picture of Rutherford
* The year he made his discovery
* Describe how his model is both accurate and inaccurate.
* A picture of his atomic model
 | * 1 point
* 1 point
* 2 points
* 1 point
 |  |
| Niels Bohr | * A picture of Bohr
* The year he made his discovery
* Describe how his model is both accurate and inaccurate.
* A picture of his atomic model
 | * 1 point
* 1 point
* 2 points
* 1 point
 |  |
|  | **Total points** | **38 points** |  |

**STRETCH—Can YOU figure this out? (If you are up for the challenge, include the following information in your presentation.)**

\*What are the limitations of using our current atomic model?

* Can we accurately represent the true distance between the nucleus and the electrons? Explain.
* Can we demonstrate the motion of the electrons? Explain why this is important.