**9 SCIENCE CHEMISTRY ASSIGNMENT**

History of the Atomic Model

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Due date:\_\_\_\_\_\_\_\_\_\_\_

**Aim:** This assignment will allow you to see how the Atomic Theory started as a philosophical idea and through scientific experimentation over time, has been developed to include the current Electron Cloud Model. As scientists discovered more information they discarded parts of older theories to design an atomic model that provided a more accurate representation of the atom. It is important for scientists to challenge current theories and modify them as more knowledge becomes available.

Your research will provide you with a historical perspective of our knowledge of the atom’s structure as well as more detailed knowledge of a specific scientist involved in atomic model development.

**1. Create a timeline that shows the history of the atomic model.**

 Use information from pages 8, 9 of text book.

 Include the year, atomic model name, scientist who discovered or developed that specific atomic model.

 Must be neatly hand drawn, in pencil, using a ruler, with an appropriate scale.

**2. Choose one of the following scientists to research.**

 Ernest Rutherford  Neils Bohr  Sir James Chadwick

 Sir Joseph J. Thomson  Philipp Lenard

If you wish to research another scientist please check with your teacher first.

1. Date of birth.
2. Place of birth.
3. Date of death.
4. Early life - information on their family life and where they grew up.
5. Where they completed their education.
6. A brief summary of what was going on in world history at the time they lived (e.g. World War 1).
7. The name of the atomic model they developed or discovered.
8. A description of the atomic model they developed or discovered.
9. A labeled hand drawing of the atomic model, use page 5 of activity book to help.
10. Awards or recognition they received (e.g. Nobel Prize, 1st person to…)
11. What else they did for a job or profession.
12. A description of some of their other contributions to science beside atomic theory.
13. A quote by your scientist or an interesting fact about your scientist.

**MARKING KEY**

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| --- | --- | --- | --- |
| **Content** | **Description** | **Possible**  **mark** | **Your**  **mark** |
| Timeline | Appropriate title  Neat - used a pencil and ruler  Appropriate scale - stretches across full page Correct dates are in order  Correct information clearly stated for each date | 1  1  1  8 |  |
| Scientist  research | Date of birth  Place of birth  Date of death  Early life - minimum 2 sentences  Education – minimum 2 sentences  Summary of history at time - minimum 2 sentences  Description of specific atomic model - minimum 2 sentences  Atomic model diagram - neatly hand drawn in pencil  - Correctly labeled  - Takes up minimum 1/3of page  Awards or recognition  Other jobs or professions - minimum 2 sentences  Other contributions to science - minimum 2 sentences  Quote or interesting fact | 1  1  1  2  2  2  2  1  1  1  2  2  1 |  |
| Notes | Hand written notes are attached | 1 |  |
| Referencing | Minimum of 2 references  Variety of sources  Referenced in correct format – see student diary | 2 |  |
| Presentation | Cover page - full name, form, teacher, assignment title  Neat  The use of headings - clear separation of sections  Correct spelling, grammar, full sentences  Relevant images or pictures – referred to in the text | 2 |  |
| **Total mark** | | 35 |  |

Mark as percentage %

Teacher’s comments:

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