**9 SCIENCE CHEMISTRY ASSIGNMENT**

History of the Atomic Model



Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Teacher:\_\_\_\_\_\_\_\_\_\_\_\_

Form:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 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

 Date of birth.

 Place of birth.

 Date of death.

 Early life - information on their family life and where they grew up.

 Where they completed their education.

 A brief summary of what was going on in world history at the time they lived (e.g. World War 1).

 The name of the atomic model they developed or discovered.

 A description of the atomic model they developed or discovered.

 A labeled hand drawing of the atomic model, use page 5 of activity book to help.

 Awards or recognition they received (e.g. Nobel Prize, 1st person to…)

 What else they did for a job or profession.

 A description of some of their other contributions to science beside atomic theory.

 A quote by your scientist or an interesting fact about your scientist.

**IMPORTANT INFORMATION**

**Plagiarism**

This assignment is to be done individually, not with a partner.

You must write in your own words not copy sentences word for word from another student or another source.

Plagiarising = instant zero on assignment and you will have to re-do it.

**Referencing**

You must reference your information (except text book information).

Include a minimum of 4 references, 2 must be from books.

Use the referencing style below and found at the back of your school diary.

If you are still unsure on how to reference correctly, ask your teacher.

**How to reference a book:**

Tsutaya, K. (2011). Crafting with Cat Hair: Cute Handicrafts to Make with Your Cat. Philadelphia: Quirk Books.

Author’s last name, first letter of first name. (Year of publication). Title of book. Place of publication: name of publisher.

**How to reference a web site:**

Rice, C. (2013). Retrieved February 8, 2014 from [www.bbc.co.uk/news/technology-25103362](http://www.bbc.co.uk/news/technology-25103362)

Author’s last name, first letter of first name. (Year of publication). Date you retrieved the information, website

**Presentation**

Cover page with your full name, form, teacher and assignment title.

Neat writing (if you struggle with this, type your information).

Correct spelling, grammar and full sentences.

The use of headings to separate each section.

Clear, labeled diagrams.

Relevant images or pictures.

Assignment neatly stapled together with this sheet attached to the front.

**Assessment policy**

Have sick note/legitimate reason from parent = new negotiated due date.

Assignment not submitted on due date and no sick note from parents = -20% mark

Assignment not submitted on new negotiated due date = -40% mark

+ Letter home to parents

+ Must attend academic completion to complete assignment

**OR**

Submit assignment to student services before academic completion date and academic completion not necessary.

Academic completion not attended = zero on assignment + Saturday detention

**If you know that you cannot submit your assignment on the due date, let your teacher know BEFORE the due date (email them if you are not in school) or just email them your assignment the night before.**

**NOTE TAKING SHEET**

You may use this page or attach your own hand written notes instead.

|  |  |  |  |
| --- | --- | --- | --- |
| **Content** | **Notes** | | |
| Name of  scientist |  | Date of  birth |  |
| Place of birth |  | Date of  death |  |
| Early life |  | | |
| Education |  | | |
| World history |  | | |
| Atomic model  description  and diagram |  | | |
| Awards or  recognition |  | | |
| Other jobs or  professions |  | | |
| Other  contributions  to science |  | | |
| Quote or  interesting  fact |  | | |

**MARKING KEY**

|  |  |  |  |
| --- | --- | --- | --- |
| **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 for each date | 1  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  1  2  2  1 |  |
| Notes | Note taking sheet is complete or own hand written notes  are attached | 2 |  |
| Referencing | Minimum of 4 references  Variety of sources - minimum of 2 book references  Referenced in correct format | 1  1  1 |  |
| Presentation | Cover page - full name, form, teacher, assignment title  Neat writing  The use of headings - clear separation of sections  Correct spelling, grammar, full sentences  Relevant images or pictures | 1  1  1  1  1 |  |
| **Total mark** | | 42 |  |

Mark as percentage %

Teacher’s comments:

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