**EMERALD ROYAL INTERNATIONAL SCHOOL, MPAPE ABUJA**

**LESSON PLAN AND NOTE FOR WEEK 5 ENDING FRIDAY, 9TH**

**FEBRUARY 2024**

**TERM: SECOND**

**WEEK: WEEK 5**

**DATE : 5TH - 9TH FEBRUARY 2024**

**SUBJECT: CHEMISTRY**

**TOPIC: SYMBOLS, FORMULA AND EQUATION.**

**SUB - TOPIC: 1. laws of chemical combination.**

1. **Laws of constant composition.**
2. **Laws of multiple proportions**

**PERIOD : 5th**

**TIME : 11:10 -11:50**

**DURATION : 40 minutes**

**CLASS: SS1**

**NUMBER IN CLASS: 7**

**AVERAGE AGE : 14 years**

**SEX: mixed**

**LEARNING OBJECTIVES:** by the end of the lesson,the students should be able to;

1. State laws of chemical combination.
2. State the laws of constant composition.
3. State the laws of multiple proportion.

**RATIONALE:** The students should understand the law of chemical combination.

**PREVIOUS KNOWLEDGE:** The students have been taught state of matter.

**INSTRUCTIONAL MATERIALS:** Chart showing balanced chemical equation.

**Reference Material:** New school chemistry for senior secondary schools by Osei- Yaw Ababio.

**LESSON DEVELOPMENT**

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| **STAGES** | **TEACHER’S ACTIVITIES** | **STUDENT’S ACTIVITIES** | **LEARNING POINT** |
| **INTRODUCTION** | The teacher introduces the lesson by reviewing the previous lesson. | The students pay attention. | To arouse the students interest. |
| **PRESENTATION**  **STEP 1** | The teacher states the laws of chemical combination. | The students pay attention. | To keep them focus. |
| **STEP 2** | The teacher asks the students to state the laws of multiple proportion. | The students states the laws of multiple proportion. | To encourage critical thinking |
| **STEP 3** | The teacher states and explains the laws of constant proportions. | The students pay attention. | To keep them focus. |
| **BOARD SUMMARY** | **LAWS OF CHEMICAL COMBINATION**  Chemistry is the study of the transformation of matter from one form to the other. These transformations often occur as a result of the combination of two different types of matter. The combination of different elements to form compounds is governed by certain basic rules. These rules are referred to as laws of chemical combination.  **1. Law of Conservation of Mass**  In simple terms, this law states that matter can neither be created nor destroyed. In other words, the total mass, that is, the sum of the mass of reacting mixture and the products formed remains constant. Antoine Lavoisier gave this law in the year 1789 based on the data he obtained after carefully studying numerous [combustion](mhtml:file://C:/Users/PERPETUAL/AppData/Local/Microsoft/Windows/Temporary Internet Files/Content.IE5/R6MFU3VL/Laws_Of_Chemical_Combination___Elements_And_Compounds_Molecules[1].mhtml!https://byjus.com/chemistry/combustion-types/" \t "C:/Users/PERPETUAL/Desktop/AMAKA%20LESSON%20NOTE%20AND%20PLAN/_blank) reactions.  **2. Law of Definite Proportions**  Joseph Proust, a French chemist stated that the proportion of elements by weight in a given compound will always remain exactly the same. In simple terms, we can say that irrespective of its source, origin or its quantity, the per cent composition of elements by weight in a given compound will always remain the same.  **3. Law of Multiple Proportions**  This law states that if two elements combine to form more than one compound, the masses of these elements in the reaction are in the ratio of small whole numbers. This law was given by Dalton in the year 1803. | The students ask questions for further clarification. | To create room for slow learners. |
| **Evaluation** | 1. State the laws of conservation of mass. 2. State the laws of constant composition. 3. State the laws of multiple proportions. | The students attempt the questions. | To ascertain their level of understanding. |
| **Conclusion** | The teacher concludes by coping the note on the board. She checks and marks the note. | The students copy the note on the board. | For future use. |
| **Assignment** | 1. What is the mass of 3 moles of oxygen. 2. State the laws of definite proportion. | The students did and submit their assignment for marking and correction. | To encourage the students to study at home. |