**EMERALD ROYAL INTERNATIONAL SCHOOL, MPAPE ABUJA**

**LESSON PLAN AND NOTE FOR WEEK 2 ENDING 22ND SEPTEMBER, 2023**

**TERM: FIRST**

**WEEK : 2**

**DATE: 18TH - 22ND SEPTEMBER, 2023**

**SUBJECT : CHEMISTRY**

**TOPIC : PERIODIC TABLE**

**SUB- TOPIC : 1. introduction to periodic table.**

1. **Periodic law.**
2. **Blocks of elements**

**PERIOD: 1ST**

**TIME : 8: 10 - 8 :50**

**DURATION: 40 minutes**

**CLASS: SS2**

**NUMBER IN CLASS:**  **7**

**AVERAGE AGE: 15 years**

**SEX: mixed**

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

1. State the scientist involved in periodic table.
2. State the periodic law.
3. Explain blocks of element.

**RATIONALE:**

**PREVIOUS KNOWLEGDE:** The student can state the groups and periods of the periodic table.

**INSTRUCTIONAL MATERIALS:** A chart showing the periodic table.

**REFERENCE MATERIALS:** New school Chemistry for Senior Secondary Schools by Osei Yaw Ababio .

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| **STAGES/STEPS** | **TEACHER’S ACTIVITIES** | **STUDENTS’ ACTIVITIES** | **LEARNING POINTS** |
| **INTRODUCTION** | The teacher introduces the lesson by reviewing the previous lesson. | The students were active. | To arouse the students interest. |
| **PRESENTATION**  **STEP 1** | The teacher explains the history of the periodic table. | The students pay attention. | To keep them focus for better understanding. |
| **STEP 2** | The teacher asks the students to state the periodic law. | The students state the periodic table. | To encourage critical thinking. |
| **STEP 3** | The teacher explains blocks of elements. | The students pay attention. | To keep them focus for better understanding. |
| **BOARD SUMMARY** | **PERIODIC TABLE AND PERIODICITY**  The periodic table was first constructed by Mendeleev in  1869. This shows the arrangement or grouping of elements  in order of increasing atomic number.  **Periodic Law:** States that the properties of the elements are  a periodic function of their atomic number.  Groups: Elements are grouped from 0-7 in vertical form.  They possess the same number of electrons in the outer  shell; with same valency provided they are of the same  group and as such same chemical properties. There are 8  main groups, group 1 to 8. Each of the groups has similar  chemical properties because they have the same number of  electrons in the outermost shell.  **Group 1** elements have one electron, and they are called  alkali metals  **Group 2** elements have two electrons, and they are called  alkaline earth metals  **Group 3 to 6** have the number of electrons corresponding to  its own group. Therefore group 3, has 3 electrons, group 4, 4  electrons etc. There are no special names for them.  **Group 7** elements have seven electrons, and they are called  **halogens**  **Group 8** elements (or group zero) have eight elections, and  they are called **Noble gas elements**  **Periods:** Elements arranged horizontally are called periods. We have period 1- 7  **Periodicity:** it is the variation in the properties of  elements in a regular pattern across the period and down  the group of the periodic table. Atomic radius, ionization  energy, electron affinity, electronegativity, and  electropositivity show periodicity in the periodic table. | The students ask question for clarification. | To create room for slow learners. |
| **EVALUATION** | The teacher evaluates the students with the following questions;   1. Who developed the periodic table. 2. State the periodic law. 3. Explain the blocks of element. | The students attempt the questions. | To ascertain their level of understanding. |
| **CONCLUSION** | The teacher concludes by copying note on the board. | The students copy the note into their note books. | For future use. |
| **HOME WORK** | Draw the modern periodic table. | The students did their assignment and submit for marking and correction. | To encourage the students to study at home. |

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**22nd September, 2023**

**DEPUTY HEAD INSTRUCTOR ADMIN**

**NB: Approved!**