**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 : INTRODUCTION TO CHEMISTRY**

**SUB- TOPIC : 1. Application/ uses of chemistry**

1. **Adverse effect of chemistry**

**PERIOD: 1**

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

**DURATION: 40 minutes**

**CLASS: SS2**

**NUMBER IN CLASS: 5**

**AVERAGE AGE: 14 years**

**SEX: mixed**

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

1. State the application/uses of chemistry.
2. Explain the uses stated above.
3. State the adverse effect of chemical.

**RATIONALE:** The students should understand application and adverse effect of chemistry.

**PREVIOUS KNOWLEGDE:** The student can state the industry that uses the knowledge of chemistry.

**INSTRUCTIONAL MATERIALS:** A chart showing the application and uses of chemistry.

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

**LESSON DEVELOPMENT**

|  |  |  |  |
| --- | --- | --- | --- |
| **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. |
| **RESENTATION**  **STEP 1** | The teacher states the application/ uses of chemistry. | The students pay attention. | To keep them focus for better understanding. |
| **STEP 2** | The teacher asks the students to explain the uses stated above in step 1. | The students explain the uses of chemistry. | To encourage critical thinking. |
| **STEP 3** | The teacher explains the adverse effect of chemistry. | The students pay attention. | To keep them focus for better understanding. |
| **BOARD SUMMARY** | APPLICATION/USES OF CHEMISTRYCosmetics For the production of cosmetics, a variety of chemical combinations are used. The texture and feel of these beauty products are determined by the chemicals incorporated. Cosmetics are made up of a variety of industrial chemicals. Synthetic chemicals and naturally occurring processed chemicals are both examples of industrial chemicals.   1. **Fuels**   Any chemical with stored energy is referred to as a fuel. Photosynthesis and respiration are two processes that store this energy in chemical bonds in the molecules. During oxidation, energy is released. The most prevalent type of oxidation is the combustion, which is the direct reaction of a fuel with oxygen.  Wood, gasoline, coal, and a variety of other fuels have energy-rich chemical bonds that are formed using the Sun’s energy and released when the fuel is burned (i.e., the release of chemical energy). Chemical fuels, often known as fossil fuels, are a valuable source of energy and are thus widely employed to meet the needs of an energy-dependent civilization. Wars TNT, RDX, HMX, gun powders used in bullets, and other explosives used in wars are all chemical compounds. It was the chemistry that allowed these chemicals to be used during the war. Nuclear weapons, which have become more well-known in recent years, are also chemical compounds.  **ADVERSE EFFECT OF CHEMISTRY**  Chemical processes and products have also affected our life adversely which include;   1. Pollution - one of the main disadvantages of chemical industries is the pollution of environment by 2. Chemical wastes from factories and oil refineries 3. Oil spillage, exhaust from motor vehicles, pesticides, fertilizer and acid rain have made the environment unclean and endangered plants and animals. 4. Corrosion of iron - corrosion of iron is also called rusting and it requires the presence of water and oxygen. Rusting can be regarded as the slow deterioration of iron to iron (iii) oxide. This iron oxide is permeable to both air and water and cannot protect the iron from further corrosion.Fe(s)--------Fe(aq) +2e   Rusting can be prevented by the following methods   1. Application of protective coating. 2. Application of sacrificial metal. 3. Alloying 4. Cathodic protection. 5. Drug abuse - drug abuse like heroin, cocain and morphine are being abuse. Many of these drugs are not used in medical treatment, unscrupulous people produce and sell them at huge profit. | The students ask question for clarification. | To create room for slow learners. |
| **EVALUATION** | The teacher evaluates the students with the following questions;   1. State at least 3 application/uses of chemistry 2. Explain any 2. 3. State 3 adverse effect of chemistry and explain any 2 | 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** | State at least 7 application of chemistry and explain any 5. | The students did their assignment and submit for marking and correction. | To encourage the students to study at home. |



22ND SEPTEMBER, 2023

APPROVED!

Deputy Head Instructor Admin