**EMERALD ROYAL INTERNATIONAL SCHOOL, MPAPE ABUJA**

**LESSON PLAN AND NOTE FOR WEEK 3 ENDING 29TH SEPTEMBER, 2023**

**TERM: FIRST**

**WEEK : 3**

**DATE: 25TH - 29TH SEPTEMBER, 2023**

**SUBJECT : CHEMISTRY**

**TOPIC : CHEMICAL INDUSTRIES**

**SUB- TOPIC : Examples of chemical industries**

**PERIOD: 1**

**TIME : 8: 10 - 8 :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. List examples chemical industry
2. Explain the listed examples of the chemical industry.

3. give examples of chemical produce by the different industries.

**RATIONALE:** The students should understand types of chemical industries.

**PREVIOUS KNOWLEGDE:** The student can state the adverse effect of chemicals.

**INSTRUCTIONAL MATERIALS:** A chart showing different types of chemical industries.

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

**LESSON DEVELOPMENT**

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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. |
| **RESENTATION**  **STEP 1** | The teacher lists examples of chemical industries. | The students pay attention. | To keep them focus for better understanding. |
| **STEP 2** | The teacher ask the students to explain the examples listed in step 1 above chemical industries. | The students explain the examples of industries listed in step 1. | To encourage critical thinking. |
| **STEP 3** | The teacher explains the products produce by the chemical industries. | The students pay attention. | To keep them focus for better understanding. |
| **BOARD SUMMARY** | EXAMPLES OF **CHEMICAL INDUSTRIES**   1. **FERTILIZER INDUSTRY** - fertilizers are used in increasing crop yield. There are three important elements in fertilizers namely nitrogen, phosphorus and potassium( N: P : K). 2. **PHARMACEUTICAL INDUSTRY -** the majority of drugs manufacture today are synthetic. Some are identical to natural substances found in plants and animals while others are entirely new. Examples sulpha drugs used in the treatment of pneumonia , quinine for the treatment of malaria and insulin for the treatment of diabetes. the most widely used drug is Aspirin which was discovered in coal tar but is now manufactured synthetically. 3. **METALLURGY -** this is the science of extracting metals from their ores and preparing them for commercial use.  **Pesticide Industries:** Pesticide is an all-inclusive term of pesticide, herbicides, weedicides etc. The pesticide includes a variety of organic and inorganic compound but the modem trend is towards the synthetic organic pesticide.  **The modem pesticide consists primarily of the three following groups:**   1. Chlorohydrocarbons (e.g. DDT, Aldrin, Dieldrin and Endrin)   (2) Organo-phosphorus compounds (e.g., Paraoson, Parathion and Malathion).  (3) Carbamates (e.g. Sevin)  Pesticide includes both organic and inorganic material. Inorganic pesticides include compounds of leads, arsenic, mercury chlorine, HCN, lead- arsenate, sodium arsenite. etc. Examples of naturally occurring pesticides are rolenone, phrethrin, nicotine and petroleum derivatives, DDT, BHC, Chloride, Methoxychlor, Aldrin etc. are the example of synthetic organic pesticide.  Waste-water from pesticide manufacture generally contain total dissolved solids in excess of 10,000 mg/1, low suspended solids, high COD and some BOD, a small amount of toxic product and pH values, that may range from high acidic to highly basic. | The students ask question for clarification. | To create room for slow learners. |
| **EVALUATION** | The teacher evaluates the students with the following questions;   1. List at 5 examples of chemical industries. 2. Explain any 3 listed above. 3. State 2 products produced by the industries. | 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** | List and explain any other chemical industries not in your note. | The students did their assignment and submit for marking and correction. | To encourage the students to study at home. |



29TH september, 2023

Deputy Head Instructor Admin

APPROVED