**A SAMPLE OF AN ACTIVE LEARNING (EIGHT COLUMN) LESSON PLAN**

**LESSON PLAN ON NATURAL SCIENCE**

**WEEK 1**

Name of Teacher: Nomnso – Jay Jay 0Nwankwo

Class: Year 7 (Brightest Stars)

No of learners: 15

Average Age of Learners: 11years

Gender: Mixed

Subject: Natural Science

Topic: Biosphere

Time: 10:00am

Duration: 40 minutes

Period: 1st period

Date: 10TH January, 2024

**CONTENT:**The biosphere ----the atmosphere, hydrosphere and lithosphere.

**RATIONALE:** The knowledge acquired will enable the learners to value the biosphere, its components, how living things adapt to their environments and sustain life on earth.

**PERFORMANCE OBJECTIVES**: By the end of the lesson, given an infographic of a biosphere, chart of concept mapping as well as videos displaying the biosphere and its component parts, the learners should be able to:

1. **Cognitive Domain (Minds-on):**
2. Define correctly a biosphere
3. Enumerate the three (3) components of the biosphere without any mistake
4. Distinguish correctly between the atmosphere, hydrosphere, and lithosphere.
5. **Affective Domain (Hearts-on):**
6. Show willingness in the lesson by analyzing correctly the requirements involved in living things sustaining life on earth.
7. Appreciate the lesson by answering the teacher’s questions with keen interest
8. **Psychomotor domain (Hands-on):**
9. Use infographic to vividly represent the biosphere (life on earth) without any mistake
10. Implore a concept map to show a biosphere and its components at a glance without mistake.
11. **Interpersonal domain (Learners' ability to interact with others and share knowledge):**
12. Discuss elaborately in groups and share knowledge and experiences acquired.

**ENTRY/ENTERING BEHAVIOUR**: Learners are familiar with their environment and things found in the environment.

**INSTRUCTIONAL MATERIALS:** Laptop/desktop, projector, videos, printed images, Charts, marker, whiteboard and coloured cardboard papers.

**INSTRUCTIONAL PROCEDURE:** Check Table 1 below.

**TABLE 1: INSTRUCTIONAL PROCEDURE:**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DURATION** | **CONTENT DEVELOPMENT** | **TEACHING SKILLS** | **INSTRUCTIONAL STRATEGIES** | **SPECIFIC INSTRUCTIONAL MATERIALS IN USE** | **TEACHER’S PERFORMANCE ACTIVITY** | **STUDENTS’ PERFORMANCE ACTIVITY** | **LEARING POINT** |  |
| 5mins | Asking provocative questions ---  How many different places on earth can you find living creatures?  What is the name given to the places on earth where living things live? | Set Induction | Brainstorming | Marker, Whiteboard | The teacher divides the learners into five groups of three members each, allows them to brainstorm and identify different parts of the earth where living creatures live. The teacher corrects learners’ mistake. | Learners answer the probing questions that the teacher has given them after brainstorming. Learners take correction from the teacher. | Learners have listed the different parts of the biosphere: land, water and air. Identification of a biosphere has been learnt. |
| 14mins | Definition of biosphere and its three component parts --- atmosphere, hydrosphere and lithosphere.  Components of the atmosphere and the lithosphere. | Use of examples and illustration, planned repetition, stimulus variation, questioning and Reinforcement | Video - simulation, concept mapping. | Laptop, desktop, projector, videos, printed images, chart | The teacher uses a slide to show an infographic of the biosphere, plays the videos showing the different components of the biosphere. The teacher also displays a chart showing the concept map of the biosphere at a glance and leads the learners to generate new ideas, discover new concepts and allows learners to integrate new concepts with older concepts. The teacher displays the slide summary for learners to copy. | The learners identify the components of the biosphere in the videos and charts, pay attention to the teacher, generate new ideas and integrate them with older concepts. They copy the slide summary into their note books | The learners have learnt the definition of biosphere, different components of the biosphere, their individual parts and living things in them. |
| 8mins | Differentiating between the atmosphere, hydrosphere and lithosphere in chart. | Use of examples and illustration, stimulus variation, reinforcement | Think-pair-share, brainstorming | Marker, whiteboard, chart | The teacher facilitates the lesson by helping the learners to think and share knowledge on the differences between the atmosphere and the hydrosphere as well as the lithosphere and thereafter displays a chart for it as well as slide summary for learners to copy. | Learners further collaborate within their groups, brainstorm and interact with one another on their findings. Learners copy the slide summary into their note books. | Differences between the atmosphere, hydrosphere and lithosphere have been learnt. |
| 8mins | Requirements for living things to sustain life in atmosphere, hydrosphere and lithosphere --- energy, gases, water, soil, favourable conditions. | Use of examples and illustration, planned repetition, questioning. | Role-play, brainstorming | Coloured cardboard papers. | The teacher reinforces the learners into five groups of three (3) members each. With the 1st group tagging themselves “energy and its importance” on earth” with cardboard paper, 2nd group--- “Gases and its important”, 3rd group--- “water and its important”, 4th group –-- “soil and its importance” and 5th group –-- favourable conditions and their importance”. The teacher guides the learners as they state their group names and enumerate their importance on earth with each member stating at least one importance, one group after the other in role-playing format. | The learners further collaborate within their groups and use role-play to demonstrate their findings on their group names and their importance on earth. | Requirem-ents for living things to sustain life on earth have been identified and learnt. |

**EVALUATION:** The teacher evaluates the lesson using the following questions:

1. Define a biosphere
2. Enumerate the components of the biosphere
3. Distinguish between the atmosphere, hydrosphere and lithosphere.
4. Analyse the requirements involved in living things sustaining life on earth.
5. Using a concept mapping, show the biosphere and its component parts at a glance.
6. Draw and label (infographic), a biosphere to show its parts.

**CLOSURE**: The teacher summarizes the lesson by guiding the learners in going through the main points of the lesson, discussing the biosphere and its component parts.The teacher gives the learners some time to reflect on what they have learnt, ask questions and as well take corrections.

**ASSIGNMENT (Homework):** Using your textbooks and internet sources, outline in tabular form more differences between the atmosphere, hydrosphere and the lithosphere and pass it tomorrow morning.

**LESSON NOTE:**

The biosphere is the place where life exists on planet earth.

COMPONENTS OF A BIOSPHERE:

1. Atmosphere: This is the layer of the gases that surround the earth. The three most important gases are nitrogen, oxygen and carbon dioxide. The atmosphere is made up of several layers.
2. Hydrosphere: The hydrosphere consists of all water on earth in all its forms.
3. Lithosphere: The lithosphere includes the rock, soil and sand on earth. The organisms depend in the lithosphere in so many ways. Examples are: Birds on their nest, termites on their mound, tree growing on the soil, earthworm on the soil etc.

Requirements for living things to sustain life on earth.

1. Energy
2. Gases
3. Water
4. Soil
5. Favourable Conditions.



**REFLECTION ON LESSON:** (you can only do this after the lesson)

* What were the strengths of the lesson?

The lesson went well as all the objectives were met. The use of videos, charts and printed images made learners understand better what the teacher was teaching, since some learners learn best by seeing things. Learners were engaged in the lesson which made it to be very interesting.

* What were the weaknesses of the lesson?

The playing of videos took a lot of time. I had to ask the learners to complete the watching of the videos on their own after the class in other to continue with other segment of the lesson. This looked very unprofessional.

* What will you need to change next time?

Next time I will manage my time and increase my pace in order to maximise time for the lesson, in order to give learners enough time to complete their tasks.