

## TOPIC: CHANGES IN NATURE

### LEARNING AREA

1. Introductory Activities
2. Activities on Changes in Plants
3. Observation and Discussion on Changes in Plants
4. Kinds of Changes that Occurred in Plants
5. Lesson Evaluation and Weekly Assessment (Test)

### PERFORMANCE OBJECTIVES

By the end of the lesson, the pupils should have attained the following objectives (cognitive, affective and psychomotor) and be able to –

1. observe and describe changes in Plants.
2. record the changes observed.
3. describe their observations.

### ENTRY BEHAVIOR

The pupils can identify changes in growing plants as permanent change.

### INSTRUCTIONAL MATERIALS

The teacher will teach the lesson with the aid of:

- Bean seeds
- Glass jars or empty tins
- Water
- Soil
- A picture of forest showing leaf fall; a record paper.

### METHOD OF TEACHING

***Choose a suitable and appropriate methods for the lessons.***

*Note – Irrespective of choosing methods of teaching, always introduce an activities that will arouse pupil's interest or lead them to the lessons.*

### REFERENCE MATERIALS

1. Scheme of Work
2. 9 – Years Basic Education Curriculum
3. Course Book
4. All Relevant Material

## CONTENT OF THE LESSON

### LESSON 1 – INTRODUCTION TO CHANGES IN PLANTS

#### CHANGES IN GROWING PLANTS

Plants grow when seeds or young plants are put in the ground to grow.

As the plant grows, changes such increase in height, width and the number of leaves take place.

Putting seeds in the ground to grow are not strange to the pupils.

The change in plants as they grow is called life cycle.

The plant life cycle consists of four stages; seed, sprout, small plant, and adult plant.

### LESSON 2 – KINDS OF CHANGE IN PLANTS

1. Further discuss the kinds of changes that occurs in plants with respect to growth, leaf fall, flower and fruits, etc. using video clips.
2. Guide the pupils to present each stage on the chart and their exercise books.

**Adult plant**



**Seeds**



**Sprout**



**Small plant**



**Adult plant**

## **PRESENTATION**

To deliver the lesson, the teacher adopts the following steps:

1. To introduce the lesson, the teacher revises the previous lesson. Based on this, he/she asks the pupils some questions;

2. Guides pupils to observe changes in a growing plant and make a record of the observed changes;

3. Initiates and guides pupils' discussion on other changes in plants e.g. leaf fall, thickening of tree bark as they grow older, etc;

Pupil's Activities – Participate in class discussion on other changes that take place in plants.

4. Summary the lesson on the board.

Pupil's Activities – Copy as the teacher writes.

### **CONCLUSION**

To conclude the lesson for the week, the teacher revises the entire lesson and links it to the following week's lesson.

=====

## **TOPIC: OUR WEATHER**

### **LEARNING AREA**

1. Introductory Activities
2. Meaning and Symbols of Weather
3. A Trip to Meteorological Station
4. Weather Records and Chart
5. Meaning and Effects of Global Warming
6. Lesson Evaluation and Weekly Assessment (Test)

### **PERFORMANCE OBJECTIVES**

By the end of the lesson, most of the pupils should have attained the following objectives –

1. identify and write simple weather symbols.
2. observe weather changes over a period of about three weeks.
3. use the weather symbols to keep records of weather changes.
4. identify some effects of climate change on the earth.
5. prepare a weather chart.
6. name the standard weather instruments.
7. improvise simple weather instruments.
8. explain global warming.
9. evaluate the effects of climate change on the earth.

### **ENTRY BEHAVIOR**

The pupils can identify some of the symbols of weather

### **INSTRUCTIONAL MATERIALS**

The teacher will teach the lesson with the aid of:

1. A chart showing the weather conditions
2. A chart showing the weather instruments
3. Various sizes of cans,

4. Sheets of metal (aluminum)
5. Cutter, Wires, Stands
6. Thermometer, Tracing paper
7. Graph sheet.
8. A chart showing the weather symbols
9. Cardboard papers
10. Coloured pencil
11. Crayons

## METHOD OF TEACHING

***Choose a suitable and appropriate methods for the lessons.***

*Note – Irrespective of choosing methods of teaching, always introduce an activities that will arouse pupil's interest or lead them to the lessons.*

## REFERENCE MATERIALS

1. Scheme of Work
2. 9 – Years Basic Education Curriculum
3. Course Book
4. All Relevant Material
5. Online Information

## CONTENT OF THE LESSON

### LESSON 1 – INTRODUCTION

Weather is the state of the atmosphere at a particular time.

It is the conditions or the state of the atmosphere with respect to heat or cold, wetness or dryness, calm or storm, clearness or cloudiness.

There are number of factors that can affect our weather,

1. Sun

2. Cloud
3. Wind
4. Temperature
5. Precipitation – **rain**, snow, dew, fog, mist
6. Moisture – water vapour
7. Humidity – amount of moisture *in particular place and time*.

## MEANING OF WEATHER SYMBOLS

Weather symbols are graphic pictures of different weather conditions commonly used for forecasting and predicting future weather conditions.

It is one of the important of tools used in meteorological station.

### WEATHER SYMBOLS

The following are the common weather symbols in Nigeria,

1. Sunny
2. Rainy
3. Cloudy
4. Windy
5. Lightning or thunderstorm

## TRIP TO A METEOROLOGICAL STATION (OPTIONAL)

Visit a meteorological station to observe and take note of how some weather's are taken.

For example, temperature and rainfall.

Present all records on the chart for presentation.

## LESSON 2 – MEANING OF WEATHER RECORDS

Weather records are consistent records that are measured under specific weather condition.

For example – the daily, weekly, monthly or yearly records of surface temperature, rainfall, wind speed, etc.

**ACTIVITY**

Get a thermometer and rain gauge for taken record of atmospheric conditions – temperature and rain gauge.

If not available, improvise as produced in the previous lesson.

**TEMPERATURE**

You need the following materials:

1. A thermometer
2. Cardboard or sheet of paper
3. Pencil
4. Ruler
5. Eraser

**ACTIVITY**

1. Choose a location in your classroom and field.
2. Read and record the temperature on the thermometer in the morning, during break period and afternoon (after school hours).
3. Read the temperatures on the sheet of paper or cardboard like the one presented below.

**RAINFALL**

Rainfall is measured using a rain gauge.

Pupil's Activities

1. Rain gauge or calibrate cylinder
2. Cardboard or sheet of paper
3. Pencil
4. Ruler
5. Eraser

### ACTIVITY

1. Choose a location in your classroom and field.
2. Placed the cylinder in the field.
3. Take the readings of every rainfall with date and time.

## LESSON 3 – EFFECTS OF CLIMATE CHANGE ON THE EARTH

### GLOBAL WARMING

Global warming is gradual increase in the world's temperature.

The **CAUSES OF GLOBAL WARMING** are causes pollution and release of harmful substances such as carbon dioxide.

The **EFFECTS OF GLOBAL WARMING** are,

1. Ice melting
2. Rising sea level
3. Shifts in animal populations
4. Spread of diseases
5. Flooding
6. Droughts
7. Storms

## PRESENTATION

To deliver the lesson, the teacher adopts the following steps:

1. Revises the previous lesson based on the pupil's related knowledge or experience.

Pupil's Activities – Participate actively in the lesson review.

2. Display charts showing weather symbol.

3. Guides and lets pupils identify each of the weather symbol.

Pupil's Activities – Examine and identify each of the weather symbol.



4. Uses the charts to introduce the lesson and explain the meaning of weather and its symbols.

Pupil's Activities – Pay attention to the lesson introduction.

5. Provides and uses pictures of standard instruments to help pupils identify and name standard weather instruments.

Pupil's Activities – Make improvise weather instruments.

4. Arranges a visit to a meteorological station.

Pupil's Activities – Visit a meteorological state to observe and learn how to use some standard weather instruments.

5. Guides pupils to improvise weather instruments.

Pupil's Activities – Make improvise weather instruments.

6. Teacher's/Pupil's Activities – Use the improvised weather instruments to take weather records.

7. Summary the lesson on the board.

Pupil's Activities – Participate actively in the lesson summary and write as instructed.

## CONCLUSION

To conclude the lesson for the week, the teacher revises the entire lesson and links it to the following week's lesson.

=====



