

SUBJECT: BASIC – SCIENCE

CLASS: PRIMARY 2

SCHEME OF WORK

3RD TERM LESSON NOTE

WEEK S	TOPICS	Learning Objectives: By the end of the lessons, students should be able to:
1	Revision of last term's work / Welcome Test	Revision of last term's work and resumption test
2	Forms of energy	Explain the meaning of energy , identify forms of energy, describe the uses of energy to man
3	Sound energy	Explain meaning, object that produce sounds, identify sounds of different objects, animals, mention instruments
4	Colour	Meaning of colour, identify different colours, objects using colour, discuss uses , colours in living and non-living things
5	Air – existence of air	Say the meaning of air, identify air, demonstrate the air in nature, uses of air
6	Air – floatation	Mention objects that float in the air, identify the characteristics of object that float in the air
7	Mid Term Test	Mid-term break / Open day
8	Water- objects that float on water	Meaning, mention objects that float on water, describe the characteristics , demonstrate how to make objects float in water
9	Water – sinking	Meaning , identify object that sink in water, describe the characteristics, examine how heavy objects sink in water
10	Road users	Say the meaning, identify different road users, explain how each users correctly use the road
11	Revisions	Revisions
12	Revision	Revisions and Final Examination
12-13	Revision	Revisions and Final Examination

REFERENCES

UNIFIED SCHEME OF WORK

WEEK: 2 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

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

1. Explain the meaning of energy.
2. Identify different forms of energy.
3. State the uses of energy to man.

ENTRY BEHAVIOUR : The pupils can define energy as the ability to work.

INSTRUCTIONAL MATERIALS: The teacher will teach the lesson with the aid of:
Chart, Pictures, View nature e.g. sun.,

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

Scheme of Work

9 – Years Basic Education Curriculum

Course Book

All Relevant Material

Online Information



CONTENT OF THE LESSON

LESSON 1 – INTRODUCTION

Energy is the ability to get work done.

FORMS OF ENERGY

The forms of energy are as follows:

1. Mechanical energy
2. Chemical energy
3. Solar energy
4. Heat energy
5. Sound energy
6. Electrical energy
7. Light energy

8. Potential and kinetic energy

IDENTIFICATION OF DIFFERENT FORMS OF ENERGY

Teacher organizes the pupils in groups or pairs depending on the size of the class and guide pupils to identify each form of energy.

1. Cars need _____ and _____ to work (Engine and petroleum).

The engine is known as mechanical energy while petroleum is known as chemical energy.

Other chemical energy include kerosene, diesel, battery, etc.

2. To dry a fish or our cloth, we use _____ (sun or fire).

Sun and fire produced heat called heat energy.

Energy from the sun is known as solar energy.

3. Speaker produce _____ (Sound).

The sound called sound energy.

4. Television, radio, etc. need _____ (Electricity).

The electricity is called electrical energy.

5. Touch light produce _____ (Light).

The light is called light energy.

LESSON 2 – FORMS OF ENERGY

1. POTENTIAL ENEMIES

Potential energy is the energy stored in an object.

2. KINETIC ENERGY

Kinetic energy is the energy that the object to move.

3. MECHANICAL ENERGY

Mechanical energy is the sum of potential energy and kinetic energy.

4. CHEMICAL ENERGY

Chemical energy is the energy stored within bond of chemical compound.

For example – battery, kerosene, diesel, etc.

5. SOLAR ENERGY

Solar energy is an energy from the sun.

It produces heat and light.

6. HEAT ENERGY



Heat energy is a form of energy that is transferred from one object to another.

For example, energy from fire, sun, electric iron, etc.

7. SOUND ENERGY

Sound energy is a form energy that can be heard by living things.

8. ELECTRICAL ENERGY

Electrical energy is the energy that make electronic to work.

9. LIGHT ENERGY

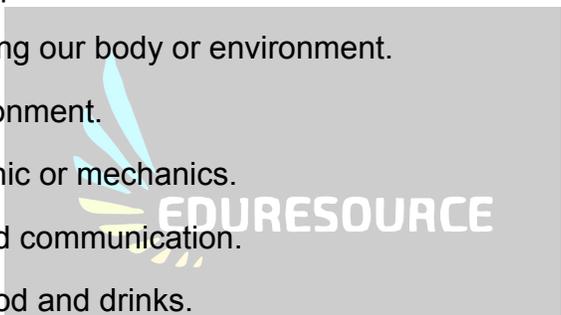
Light energy is a kind of energy that has the ability to make different light visible to the eyes.

For example – torch light, bulb, fire, etc.

LESSON 3 – USES OF ENERGY TO MAN

Energy is very important because it used,

1. It is used for cooking, boiling, drying, frying and ironing.
2. It is used for moving from one place to another.
3. It is used for heating and cooling our body or environment.
4. It is used for lighting our environment.
5. It is used to power our electronic or mechanics.
6. It is used for entertainment and communication.
7. It is used for preserving our food and drinks.



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. Teacher organizes the pupils in groups or pairs depending on the size of the class.
3. Teacher sample or chart showing different source of energy.
4. Teacher lets pupils identify and state their uses. For example, the sun is used for drying cloth, etc.

Pupil's Activities – Identify and state the uses of battery, kerosene, sun, torch light, etc.

5. Teacher uses the sample or chart to introduce the lesson and discuss the meaning and forms of energy.

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

6. Teacher guides pupils to identify different forms of energy and how they work.

Pupil's Activities – Demonstrate the usefulness of different energy.

7. Teacher discuss each form of energy with the groups or pairs using appropriate examples.

Pupil's Activities – Explain each form of energy with appropriate examples.

8. Teacher leads a discussion on the uses of energy to man.

Pupil's Activities – Analyze the importance of energy in their communities and daily life.

9. Teacher summarizes the lessons on the board with appropriate lesson evaluation.

Pupil's Activities – Participate actively in the lesson summary by responding correctly to the questions and writes 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.
- Next Lesson – **Sound Energy and Objects that can Produce Sound Primary 2 (Basic 2) Term 3 Week 3 Basic Science and Technology**

LESSON EVALUATION: Teacher asks pupils to,

1. Explain the meaning of energy.
2. Identify different forms of energy.
3. Mention 5 forms of energy.
4. State 5 uses of energy to man.
5. Analyze the importance of energy in their communities



WEEK: 3 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

PREVIOUS LESSON – Meaning and Forms of Energy | Uses of Energy to Man Primary 2 (Basic 2)
Term 3 Week 2 Basic Science and Technology

TOPIC – SOUND ENERGY

LEARNING AREA

1. Introduction
2. Meaning of Sound Energy
3. Things that Produce Sound
4. Making Sound
5. Importance of Sound
6. Weekly Assessment (Test)

LEARNING OBJECTIVES

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

1. explain the meaning of sound energy.
2. state the things that make sounds.
3. name some instruments that produce sounds.
4. make different kinds of sounds with or without the instruments they made.
5. detect the sound animals, crying baby, running, water, etc.

ENTRY BEHAVIOUR

The pupils can identify different things that make sounds.

INSTRUCTIONAL MATERIALS

The teacher will teach the lesson with the aid of:

1. A chart showing some musical instruments
2. Bamboo stem
3. Paw-paw stalk
4. Knife
5. String
6. Some musical instruments, e.g. talking drum, mouth organ, etc.

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

Sound is anything that can be heard by people or animals.

Hearing is the ability to discover sound.

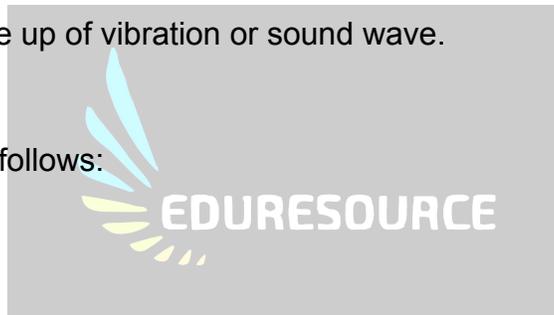
Humans and other mammals have the ability to detect and recognize different sound from nature or other sound.

It is a form of energy that is made up of vibration or sound wave.

IMPORTANCE OF SOUND

The importance of sound are as follows:

1. It is used communication.
2. It is used for sending signals.
3. It is used for control.
4. It is used as reminder.
5. It is used to detect life.



LESSON 2 – TYPES OF SOUND

There are many different types of sound,

1. Audible and inaudible sounds
2. Pleasant and unpleasant sounds
3. Soft and loud sounds
4. Noise and musical sounds

1. AUDIBLE AND INAUDIBLE SOUNDS

Audible sounds is a sound that is loud enough to be heard.

Inaudible sound is a sound that is not loud enough to be heard.

2. PLEASANT AND UNPLEASANT SOUNDS

Pleasant sound is a sound that is good and in harmony with human hearing.

Unpleasant sound is a sound that is not good and not harmony with human hearing.

3. SOFT AND LOUD SOUNDS

Soft sound is a sound that has a very low volume while loud sound is a sound has a very high volume.

4. NOISE AND MUSICAL SOUNDS

Noise is a unpleasant sound while music is a pleasant sound.

Music can be both pleasant and unpleasant sounds.

SOURCE OF SOUND/THINGS THAT PRODUCE SOUND

There are different source of sound,

1. Voice sound
2. Instrumental sound
3. Natural sound

1. VOICE SOUNDS

Voice is a sound produced by human or animals.

2. INSTRUMENTAL SOUNDS

Instrumental sound is sound produced by musical instruments like drums, piano, etc.

3. NATURAL SOUNDS

Natural sound is sound produced by nature such as the trees, air, thunder, rivers, occurs, etc.

LESSON 3 – MAKING SOUND

Teacher organizes the pupils in groups or pairs depending on the size of the class to,

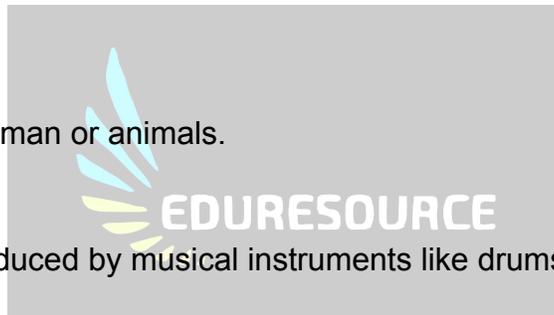
1. MAKE ANIMAL SOUNDS

- Dog
- Goat
- Elephant
- Lion, etc.

2. MAKE ENGINE OR MACHINE SOUNDS

- Motor
- Motorcycle
- Generator
- Fridge, etc.

3. MAKING SOUNDS WITH LOCAL AND FOREIGN INSTRUMENTS



- Drum set
- Piano
- Trumpet
- Bell
- Tambourine

SOUND RECOGNITION (QUIZ COMPETITION)

Based on the existing groups or pairs, play the different sounds (such as animal sounds, crying baby, running water, etc.) for pupils to detect or recognize.

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 identify forms of energy.
3. Discusses sound and leads pupils to identify sounds.
Pupil's Activities – Make sounds with different parts of their bodies (e.g feet, hands, mouth).
4. Uses the chart to guide pupils to identify different that produce sounds.
Pupil's Activities – Identify and name instruments that produce sound.
5. Guides pupils to make musical instruments from local materials.

Pupil's Activities –

- Construct local musical instruments from available materials.
- Play games with sound using the musical instrument they made.

LESSON EVALUATION: The Teacher asks pupils to,

1. Explain the meaning of sound energy.
2. State 5 things that make sounds.
3. Name 5 instruments that produce sounds.
4. Make different kinds of sounds with or without the instruments they made.
5. Detect the sound animals, crying baby, running, water, etc.

CONCLUSION

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

WEEK: 4 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

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

1. Identify at least four colours.
2. Colour objects with various colours.
3. Uses of colours.
4. Analyze the importance of colour.

ENTRY BEHAVIOUR : The pupils can identify the primary colours.

INSTRUCTIONAL MATERIALS

The teacher will teach the lesson with the aid of:

1. Paper
2. Crayons
3. Coloured pen
4. Colour charts

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

Scheme of Work

9 – Years Basic Education Curriculum

Course Book

All Relevant Material

Online Information

CONTENT OF THE LESSON

LESSON 1 – INTRODUCTION

IDENTIFICATION OF COLOUR

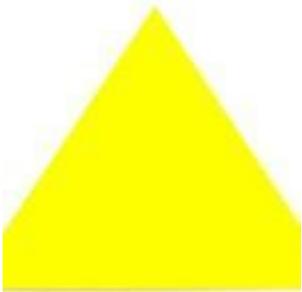
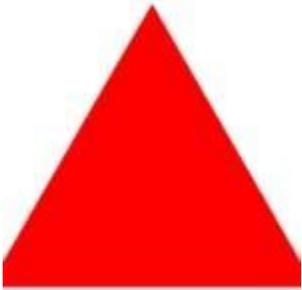
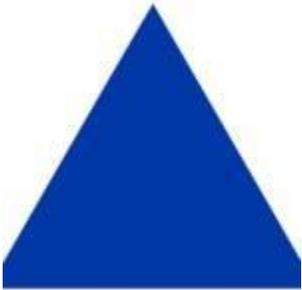


CLASSIFICATION OF OBJECTS OR SHAPES ACCORDING TO COLOURS

Teacher organizes pupils in groups or pairs depending on the size of the class to –

1. IDENTIFY COLOUR WITH SHAPES

For example, green circle, etc.



2. IDENTIFY COLOUR WITH LIVING AND NON LIVING

Teacher displays samples, chart or flashcards showing living and non living things with different colours for the groups or pairs to identify each with their colour(s).

For example, chart showing the following:

Living things – goat, dog, lizard etc.

Non living things – balls, flag, cloth, etc.

MEANING OF COLOUR

Colour is the surface appearance of something within and around us.

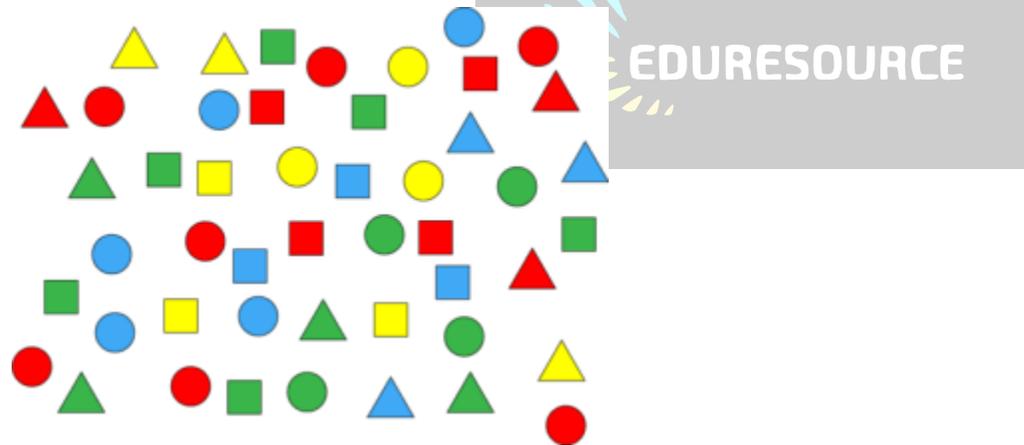
USES OF COLOUR

The uses of colour are as follows:

1. Painting
2. Logo
3. Identity
4. Dyeing
5. Beautification and Decoration
6. Design
7. Consume
8. Writing and drawing
9. Traffic control

LESSON 2 – CLASSIFICATION OF SHAPES ACCORDING TO COLOURS

Teacher asks groups or pairs to organize the following shapes according to colour.



LOGO AND COLOUR

1. National flag
2. Mtn, Glo and Airtel logo
3. School uniform scandals, building, books, etc.
3. Army, navy and police colour

LESSON 3 – REVISION AND WEEKLY ASSESSMENT (TEST)

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. Teacher organizes pupils in groups or pairs depending on the size of the colour.

3. Teacher displays samples of water colour or colour pen.

4. Teacher lets groups or pairs identify.

Pupil's Activities – Identify red, blue, green and white colours.

5. Teacher uses the samples and pupil's responses to introduce the lesson.

Pupil's Activities – Pay attention to the lesson to understand the concept of the lesson.

6. Teacher guides groups or pairs to identify

- colour and shape.
- colour of living and non living.

Pupil's Activities – Identify objects through colours – living and non living things.

7. Teacher asks pupils to state the reasons why their school uniform is different from other schools.

Pupil's Activities – Discuss the importance of colour identity.

8. Teacher uses the pupil's responses to lead a discussion on the meaning and uses of colour.

Pupil's Activities – Analyze the importance of colour in their communities.

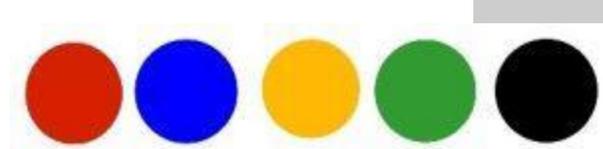
9. Teacher guides pupils to identify colour of different bodies and classify shapes (objects) according to colour.

10. Teacher summarizes the lessons on the board with appropriate lesson evaluation.

Pupil's Activities – Participate actively in the summary of the lesson by responding correctly to the questions and write as instructed.

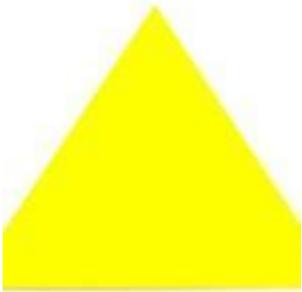
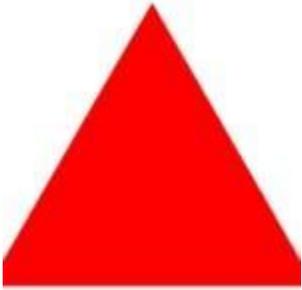
LESSON EVALUATION: Teacher asks pupils to,

1. Identify the following colours,

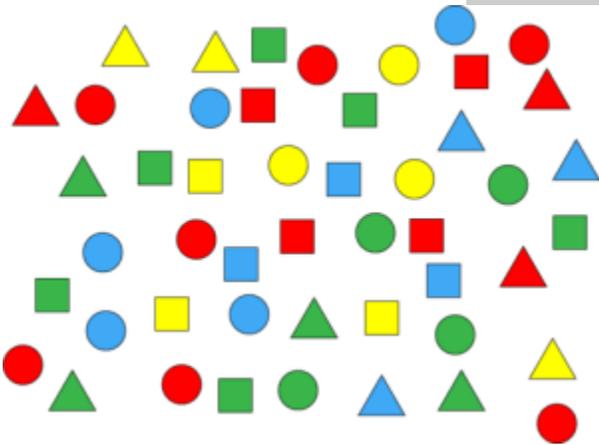


2. Identify the shape and colour,





3. Group the following shapes according to colour,



4. State the colour(s) of the following:

- National flag
- Mtn, Glo and Airtel logo
- School uniform scandals, building, books, etc.
- Army, navy and police colour

5. Explain the meaning of colour.
6. State 5 uses of colour.

CONCLUSION

- To conclude the lesson for the week, the teacher revises the entire lesson and links it to the following week's lesson.
- Next Lesson – **Existence of Air – Meaning and Properties of Air | Uses of Air Primary 2 (Basic 2) Term 3 Week 5 Basic**

WEEK: 5 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

PREVIOUS LESSON – Colour Identification | Classification of Colours Using Objects | Uses of Colours Primary 2 (Basic 2) Term 3 Basic Science and Technology

TOPIC – EXISTENCE OF AIR

LEARNING AREA

1. Introduction
2. Existence of Air
3. Meaning and Properties of Air
4. Things that Contain Air
5. Importance (Uses) of Air
6. Revision and Weekly Assessment (Test)

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

1. Demonstrate the existence of air.
2. Say The meaning of air.
3. Identify the properties of air.
4. State the uses of air.
5. Appreciate the importance of air in their daily life.

ENTRY BEHAVIOUR : The pupils can demonstrate the existence of air by breathing in (out), blowing air in the balloon, etc.

INSTRUCTIONAL MATERIALS The teacher will teach the lesson with the aid of:

1. Electric fan
2. Hand fan
3. Straw and water

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

Air is around.

We breathe in oxygen and breathe out carbon dioxide.

Oxygen and carbon dioxide are air (gas).

All living things need air.

The human, animals and plants would die without air.

Note – When you ask pupils to breath in and out, please don't ask them to close their noses.

MEANING OF AIR

Air is the mixture of gases that surround us.

The gases are invisible, odorless and tasteless.

When air is in motion, it is called wind.

Wind is air in motion.



EXISTENCE OF AIR

Air exists because we breathe it everyday and it is necessary for all things living on this earth.

Apart from simple machines, other machines can not work perfectly without air.

For example – the car, generator, all air machines, pumping machine, etc.

ACTIVITIES ON EXISTENCE OF AIR

Materials – balloon, light ball, whistle, hand fan, rechargeable fan and musical instruments.

Teacher organizes pupils in groups or pairs depending on the size of the class to,

1. Gently breathe in and breathe out.

Breathing is the act of expelling air from the lungs.

2. Blow air in balloon, light ball, whistle or musical instruments.

LESSON EVALUATION

Teacher ask pupils to,

1. say the different between oxygen and carbon dioxide.
2. demonstrate the existence of air.
3. state 5 things that produce air.
4. mention 5 living things that depends on air.
5. mention 5 machines that cannot work without air.
6. state 5 things contain air.

LESSON 2 – PROPERTIES OF AIR

ACTIVITIES ON PROPERTIES OF AIR

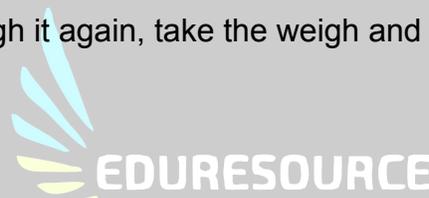
Based on the existing groups or pairs, teacher guides pupils to carry out the following instructions,

1. AIR HAS WEIGHT

Materials needed – Ball and scale balance

Guided Instructions,

1. Weigh a deflated football bladder on a scale balance, take the weigh and write it down.
2. Inflate the football with air and weigh it again, take the weigh and write it down.
3. Compare the weights.
4. Which one is heavier?
5. What makes it heavier, if inflated ball is heavier?
6. What does this suggest to you?



Expected responses – Air has weight.

2. Air OCCUPIES SPACE

Materials needed – Bottles and buckets of water.

Guided Instructions,

1. Put a small bottle upside down into a basin of water.
2. Turn the bottle up side down and put inside the water. What do you observe?

Expected responses – Water cannot go in the bottle.

3. Gently turn the mouth of the bottle toward the surface of the water. What do you observe? ***Pupil's comment – Water can enter the bottle.***

4. Explain why water cannot enter into the bottle in the first instance.
5. Is the bottle empty after? ***Pupil's comment – No, it is not empty.***

Conclusion – Air occupies space.

For the water to enter the bottle, the air must go out.

But if the air cannot come out, water cannot enter.

3. AIR HAS PRESSURE

Materials needed – Balloons

Guided Instructions,

1. Inflate a balloon.
2. Touch it gently.
3. How does it feel to touch.
4. Release the inflated balloon in front of pieces of paper.
5. What do you observe? ***Air blown the pieces of paper away.***

Teacher's comment – Air can push anything about because it has weight and pressure.

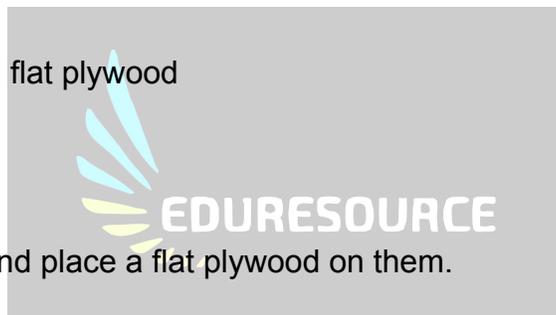
The weight of an object is force that push objects about.

4. AIR HAS WEIGHT

Materials needed – Balloon and flat plywood

Guided Instructions,

1. Inflated 4 balloons.
2. Put all the balloons together and place a flat plywood on them.
3. One of you should sit on it.
4. What do you observe?
5. What keeps the pupil afloat on the balloons?



Teacher's/Pupil's comment – Air has or support weight.

Bicycles, cars and lorries are resting on tyres containing a lot of air.

PROPERTIES OF AIR

The properties of air are as follows:

1. Air has weight.
2. Air occupies space.
3. Air exert pressure.
4. Air supports weight.
5. Air is affected by heat.

6. Air can be compressed.
7. Air is affected by altitude.
8. Air is made up of gases

LESSON 3 – USES OF AIR

The importance (uses) of air are as follows:

1. Air supports lives.
2. Air supports water cycle.
3. Air supports pollination.
4. Air helps in transport.
5. Air minimizes pollution.
6. Air regulates temperature.

LESSON EVALUATION

Teacher asks pupils to analyze,

1. air supports lives.
2. air supports water cycle.
3. air supports pollination.
4. air helps in transport.
5. air minimizes pollution.
6. air regulates temperature.



REVISION AND WEEKLY ASSESSMENT (TEST)

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. Teacher organizes pupils in groups or pairs depending on the size of the class.
3. Teacher guides pupils to gently breathe in and breathe out.
4. Teacher asks pupils, what did you breathe in and breathe out?
Pupil's Activities – We breathe in oxygen and breathe out carbon dioxide.
5. Teacher asks pupils, what does mean when someone doesn't breathe anymore?
Pupil's Activities – When someone doesn't breathe anymore means the person is death.
6. Teacher uses the pupil's responses to introduce the lesson and leads a discussion on the meaning of air and its existence.

Pay attention to the lesson introduction to understand the concept of the lesson.

7. Teacher guides the groups or pairs to demonstrate the existence of air by breathing, blowing air inside the ball, whistle or musical instruments.

Pupil's Activities – Prove that air exists.

8. Teacher leads a discussion on the properties of air by using different activities.

Pupil's Activities – Identify and discuss the properties of air.

9. Teacher guides pupils to identify and discuss the importance (uses) of air.

Pupil's Activities – Analyze and appreciate the importance of air in our daily life.

10. Teacher summarizes the lessons on the board with appropriate lesson evaluation.

Pupil's Activities – Participate actively in the summary of the lesson by responding correctly to the questions and write as instructed.

LESSON EVALUATION: Teacher asks pupils to,

1. Say the different between oxygen and carbon dioxide.

2. Discuss and demonstrate the existence of air.

3. State 5 things that produce air.

4. Mention 5 living things that depends on air.

5. Mention 5 machines that cannot work without air.

6. State 5 things contain air.

7. Mention 5 animals that breathe in and out air.

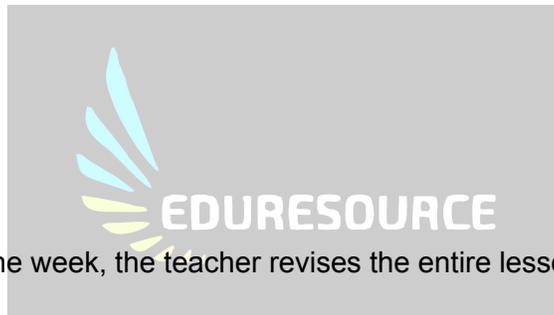
8. Plants breathe in and out air. True/False

9. Identify 5 things that used air to work well. *Hint – tyre, ball, balloon, etc.*

10. State 5 uses of air.

11. Analyze how,

- Air supports lives.
- Air supports water cycle.
- Air supports pollination.
- Air helps in transport.
- Air minimizes pollution.
- Air regulates temperature.



CONCLUSION

- To conclude the lesson for the week, the teacher revises the entire lesson and links it to the following week's lesson.
- **Next Lesson – Air (Flotation) – Objects that Float in the Air | Characteristics of Objects that Float in Air | The Effects of Air on the Body Primary 2 (Basic 2) Term 3 Week 6 Basic Science and Technology**

WEEK: 6 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

PREVIOUS LESSON – Existence of Air – Meaning and Properties of Air | Uses of Air Primary 2 (Basic 2) Term 3 Week 5 Basic

TOPIC – AIR (FLOATATION)

LEARNING AREA

1. Introduction
2. Things that Float in Air
3. Make Objects to Float in Air
4. Characteristics of Objects that Float in Air
5. Effects of Moving Air on the Body
6. Revision, Lesson Evaluation and Weekly Assessment (Test)

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

1. Observe and identify things that float in air.
2. Make objects float in air.
3. State the characteristics of objects that float in air.
4. Mention the effects air on the body.

ENTRY BEHAVIOUR The pupils can state and discuss the importance of air.

INSTRUCTIONAL MATERIALS The teacher will teach the lesson with the aid of:

1. Balloons
2. Old newspaper
3. Thread
4. Gum
5. Sticks
6. Strings
7. Stones
8. Pencils.

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

Air is around us and parents everywhere.

We breathe in oxygen and breathe out carbo dioxide.

All living things need air.

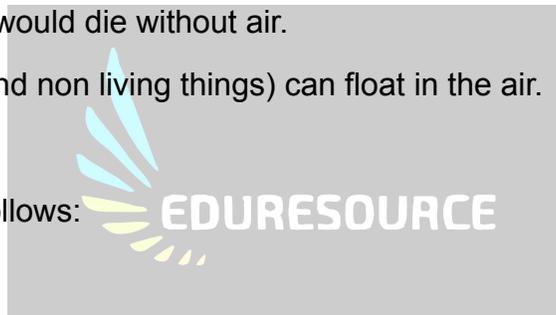
The human, animals and plants would die without air.

There are many objects (living and non living things) can float in the air.

OBJECTS THAT FLOAT IN AIR

The objects that float in are as follows:

1. Paper
2. Kites
3. Balloons
4. Dust
5. Birds
6. Flies
7. Aeroplane
8. Feathers
9. Dried leaves
10. Soap bubbles, etc.



CHARACTERISTICS OF OBJECTS THAT FLOAT IN AIR

Teacher organizes pupils in groups or pairs depending on the size of the class to identify the characteristics of objects that float in air.

LESSON 2 – EFFECTS OF AIR ON THE BODY

The effects of air on the body are as follows:

A gentle wind is called breeze because,

1. Gently wind cool our body.
2. It makes us relax and peaceful.
3. It supports movement.
4. It supports plants growth.
5. It is useful flying kites, aeroplane, etc.
6. It is useful for separating shafts from grains.
7. It is a source of energy.
8. It is useful for driving windmill, ship, boat, etc.

LESSON 3 – MAKING OBJECTS THAT FLOAT IN AIR

Based on the existing groups or pairs, teacher guides pupils to make objects that can float in air.

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. Teacher organizes pupils in groups or pairs depending on the size of the class.
3. Teacher asks pupils to make a list of objects that float in air.

Pupil's Activities – Identify the objects that float in air.

4. Teacher uses the pupil's responses to introduce the lesson and leads a discussion on objects that float.

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

5. Teacher guides pupils to identify the characteristics of some of the objects that float in air.

Pupil's Activities – Identify the characteristics of some of the objects that float in air.

6. Teacher leads a discussion on the effects of air on the body.

Pupil's Activities – Identify the effects of air on the body.

7. Teacher guides pupils to make and fly a kite.

Pupil's Activities – Make objects that float in air.

8. Teacher summarizes the lessons on the board with appropriate lesson evaluation.

Pupil's Activities – Participate actively in the summary of the lesson by responding correctly to the questions and write as instructed.

LESSON EVALUATION: Teacher asks pupils to,

1. Name five things that float in air.
2. Make and fly paper kites.
3. State 5 effects of air on the body.

CONCLUSION

- To conclude the lesson for the week, the teacher revises the entire lesson and links it to the following week's lesson.
- Next Lesson – **Objects that Float on Water Primary 2 (Basic 2) Term 3 Week 8 Basic Science and Technology**

WEEK: 7 MID-TERM BREAK / TEST / OPEN DAY

WEEK: 8 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**
LEARNING OBJECTIVES: At the end of the lesson, Pupils should be able to

1. Understand the word “float”
2. Identify objects that float on water
3. Demonstrate how to make objects float on water

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: WATER – OBJECTS THAT FLOAT ON WATER

Some objects float on water. That is, they stay on the surface of water. Objects that float on water are light. For an object to float on water, the weight of the object must be less than or equal to the weight of water where the objects in placed on. In some cases, objects that float are hollow inside or are filled with air.

Examples of objects that float on water



Paper boat



Pencil



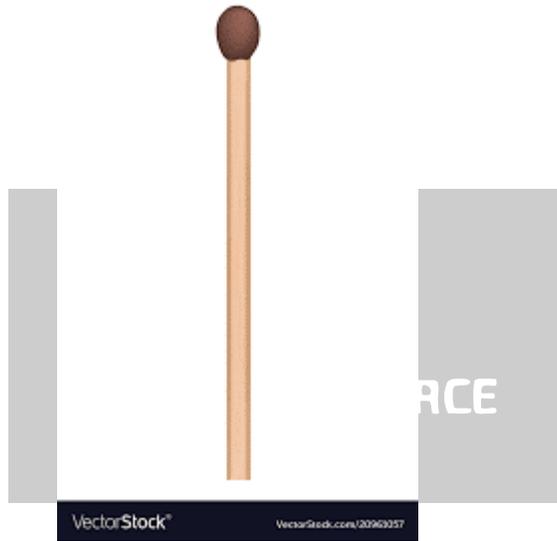
Plastic spoon



Plastic ball



Closed plastic bottle



Match Stick

CLASS ACTIVITY

1. Get an empty bottle, with the lid on, and put it in a bowl of water. What did you notice? Did it sink or float?
2. Get the same bottle, take the lid off and put some water into the bottle. Did the bottle sink or float?

WEEK: 9

DAY:

SUBJECT:

DATE:

TOPIC:

SUBTOPIC:

PERIODS:

DURATIONS:

LEARNING OBJECTIVES: At the end of the lesson, Pupils should be able to

1. Understand the word “**sink**”
2. Identify objects that sink in water
3. Demonstrate how to make objects sink in water

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: WATER - SINKING OBJECTS

An object that goes down below the surface of water is said to **SINK**. This is unlike an object that stay on top of water or remain in the surface of water, which is said to **FLOAT**. Heavy objects usually sink in water.

Examples of Objects that sink in water



Stone



Nails



Bottle filled with water



Coin



Key



Mug



Glass cup



Metal spoon

EVALUATION

1. When an object stays on top of the water, it is said to _____
2. When an object goes down below the surface of water, it is said to _____
3. Mention 2 objects each that sink and float in water.

ACTIVITY

Pupils should collect different objects around them to see if they will float or sink

such as leaves, wood and flowers, balloon, etc.

Note: that the paper boat will float for a while but if the paper gets soaked with water it will start to sink.

WEEK: 10
DATE:

DAY:
TOPIC:

SUBJECT:

SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, Pupils should be able to

1. Meaning of Road users
2. Identify different types of road users
3. Explain how each users correctly use the road

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: ROAD USERS

Road users are children, cars, bicycles, animals, etc.

ROAD SAFETY AND SIGNS

Road signs are used to give instructions to road users, other drivers and pedestrians. Road signs help to keep road users safe.

Some common road signs include:



Children crossing

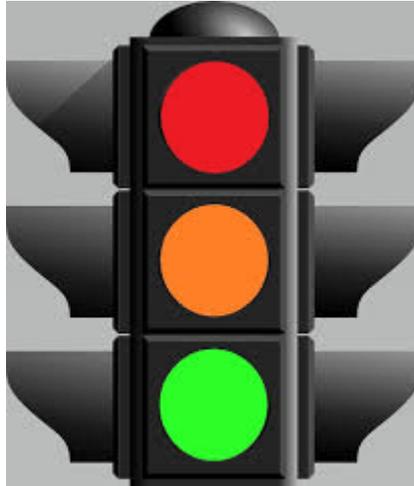
Stop Sign



No U- turn



Do not Enter



Bend Ahead

Traffic Light



No parking

Trucks prohibited

EVALUATION

Mention and draw any 5 road signs you know.



Be Responsible. Follow Traffic Rules



Traffic regulations are the various laws, regulations and signs guiding the road users on the proper and effective use of roads. The road users include motorist, pedestrians, cyclists, motorcyclists and passengers.

CATEGORIES OF ROAD USERS

- The Motorist
- The Pedestrian
- The Cyclist
- The Motorcyclist
- The Child
- Animal
- The Hawker
- The Trader



I. THE MOTORIST

This class of road user is enclosed in motor vehicles. Because of this enclosure, they feel protected and often assume absolute immunity from accidents. This is a fatal self delusion for which the Federal Road Safety Commission has coined expression: Accident Immunity Delusion Syndrome (RAIDS).

Rules for Road Users

Driver's Protection:

- The driver of a vehicle has only the protection guaranteed by his STRICT obedience to traffic rules.
- The best protection inside the vehicle is the USE OF SEAT BELT
- Always fasten your seatbelt and ensure that everyone in your vehicle belts up. S.10(4)(ee), FRSC Act, 2007



Alcoholic Drinks and Drugs

- Never drive after consuming alcoholic drinks or while under the influence of drugs
- Maximum blood alcohol level for drivers is 0.5gms per litre or 0.05% of blood alcohol (BAC)
- Alcohol affects your vision, judgement, reduces coordination, and slows down reaction
- Reduce driving stability even when taken below the legal limit. "DO NOT DRINK AND DRIVE". S.10(4)(K), FRSC Act, 2007



Long distance driving

Driving for long distances tend to make you sleepy. To prevent this, ensure there is plenty of fresh air in your vehicle.

- Stop in a convenient place, rest and then walk around to let blood circulate and feed your brain adequately.
- Take a break of 15 minutes after every four (4) hours of driving.
- Do not rely on stay-awake drugs like coffee, kola nuts, and even chewing sticks.
- Have co-driver for any journey exceeding 10 hours.

Avoid fatigue

- Fatigue is a deadly, yet silent killer that often goes unnoticed.
- Drivers tend to overestimate their capabilities and thus, do not know when to act on their tiredness.
- Do not drive if you are unwell, exhausted or tired from over-work, as ability to drive and coordinate becomes difficult when under stress, be it emotional or physical.

Passenger's Protection/Responsibilities of Drivers

- Drivers hold not only their lives but also that of passengers in their hands.
- Comprehensive insurance policy offers cover both the vehicle and passengers in the event of injuries or death occurring from road crashes.
- Vehicle owners are therefore required by Road Transportation Safety Standardization Scheme (RTSS) to ensure that their vehicles are properly insured.
- Drivers are to ensure that passengers enter and disembark at officially designated places where provided.
- Drivers are not to overload their vehicles with goods or passengers. Passengers stand very high risk of severe injury or death in overloaded vehicles.

Vehicle protection

- Keep your vehicle in good working condition, paying particular attention to lights, brakes, steering mechanism, tyres and tyre pressure, direction indicators and wipers.
- Windscreens and windows should be clean and clear of obstructing materials and ornaments. S.10(4)(w), FRSC Act, 2007

RULES ON THE USE OF ROADS

PEDESTRIANS: The pedestrians refer to persons on foot who have a need to either walk beside the road, cross the road or engage with other road users.

DUTIES OF PEDESTRIANS

1. Always walk on the side of the road.
2. Ensure you are walking to face oncoming traffic.
3. If you are walking in the dark, wear bright or reflective colour of clothes such as white, green so that you will be easily seen by motorists.
4. Look left and right of the road and left again before crossing the road.
5. Use the pedestrian bridge and zebra crossing where they are available.
6. Observe road signs.
7. Respect the rights of other road users.

CYCLISTS: Cyclists refers to road users who engage in the use of the road by riding either in motorcycles, bicycles, tricycles, etc.

DUTIES OF CYCLISTS

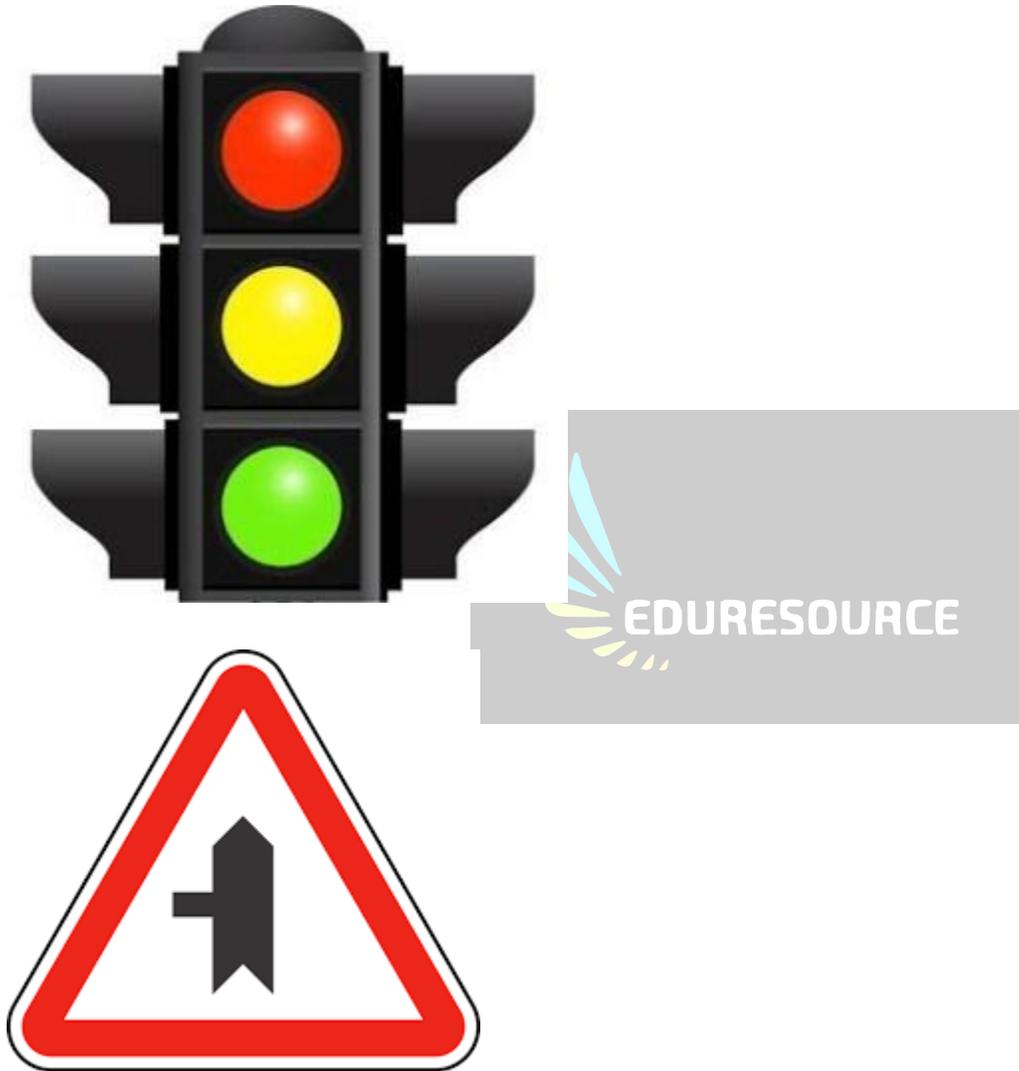
1. If you are riding a cycle, ensure it is in good condition; check the brakes, tyres, lamps and rear reflectors.
2. Take a quick look behind you before starting off and if you wish to turn, hold out your arm sideways, showing the direction you wish to turn to.
3. Do not ride too close to moving vehicles.
4. Do not wear flowing garments to ride a motorcycle or a bicycle.
5. Ensure you put on a helmet.
6. Do not carry more than one passenger on your motorcycle.
7. Do not carry loads that are too heavy in order to ensure balance.
8. Respect road signs.
9. Do not drink and ride.
10. Respect the right of other road users.
11. Obey traffic warders.

Road traffic lights sign are lights used to control the movement of traffic.

They are placed on roads.

There different colors of lights that tell the drivers what to do.

IDENTIFICATION OF ROAD TRAFFIC LIGHTS SIGN AND COLOUR



FUNCTIONS OF ROAD TRAFFIC LIGHTS COLOUR

RED

Red means **STOP**

This tells drivers to stop.

YELLOW

Yellow means READY TO GO

This tells drivers to stop when it is safe to, because the light is about to turn red.

GREEN

Green means GO

This means the driver can start driving or keep driving.

IMPORTANCE OF TRAFFIC LIGHTS AND ROAD SIGNS

1. The traffic lights control movements.
2. The traffic lights conduct orderly flow of movement.
3. The traffic lights reduce road accidents.
4. The traffic lights make the road safer for the users.

WEEK: 11

REVISIONS



WEEK: 12

EXAMINATIONS