Federal Ministry of Education

Accelerated Basic Education Curriculum
Basic Science and Technology
(Level 2: Stages 1 - 3)

NIGERIAN EDUCATIONAL RESEARCH AND DEVELOPMENT COUNCIL (NERDC)

Nigerian Educational Research and Development Council (NERDC)

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Foreword

One of the targets set out by the Federal Government of Nigeria under the current dispensation is the eradication of the menace of out-of-school children that has bedeviled the country since the past three decades. This target area of concern formed one of the 10 pillars of the Ministerial Strategic Plan (2016 -2019) which have metamorphosed into the Ministerial Strategic Plan (2018 -2022). The effort asserted in this direction, is in line with the Constitution of the Federal Republic of Nigeria, which recognizes education as a fundamental right of every child, irrespective of ethnic background, social-economic status, religious affiliation and family background.

One of our turnaround strategies, as outlined in the Ministerial Strategic Plan, is to create opportunities for the education of all children and youths, who for one reason or the other, are out of school. These children, who are found in many parts of Nigeria, constitute about 5% of the world's population of Out-of-School children.

The turnaround strategies were based on identified gaps and challenges in the education sector. One obvious gap identified was the lack of well-thought educational programmes that specifically addresses the peculiarities of overage children who are not in school. The Accelerated Basic Education Programme (ABEP) is therefore a step taken towards filling the identified gap. Aside from addressing our domestic situation, the programme is in line with global best practices.

The specific goal of the Programme is to mop-up (or reduce to the barest minimum) and bring back to school the large number of overage and out-of-school children who are disadvantaged, marginalized and affected by crises, disasters or other socio-economic factors.

I am therefore pleased to note that the Nigerian Educational Research and Development Council (NERDC) has taken this step towards the provision of the curriculum to drive the AEP programme. I congratulate NERDC and her partners for successfully completing the development of the Accelerated Basic Education Curriculum for the Implementation of the Accelerated Basic Education Programme in Nigeria. I wish to particularly thank Plan International and Save the Children International for supporting the development of the curriculum under the European Union funded project: The EU Response, Early Recovery and Resilience in Borno State: Education Component. I also acknowledge the contributions of all experts who worked hard in the development of the curriculum. The curriculum is flexible and provides learning options and pathways for learners.

It is therefore my pleasure to present the curricula to all Nigerians and our foreign partners for the education of out-of-school children under the accelerated education programme.

My utmost hope is that the effective use of the curricula will bring about our desired aim of providing quality basic education to all Nigerian children irrespective of the circumstances surrounding their existence.

ADAMU ADAMU
Honourable Minister of Education, FME, Abuja.
October 2019

Preface

Nigeria, in the recent past, has been rated as one of the countries in the world with a huge population of out-of-school children and youths. The situation became worsened by the escalation of insurgency in the northeast leading to closure of many schools and the displacement of huge number persons including children and adolescents. Credible sources have it that many schools in the northeast states were closed from November 2014 to June 2015. By August 2017, an estimated 57% of schools were still closed in Borno.

Although many of the schools have been reopened, a high percentage of children are yet to return to school due to poverty and other socio-economic factors. There are also pockets of attack, psychosocial factors that affect human instability including where to start education again, having been out of school for many years (up to 10 years, in some instances).

Further, in the recent times, there have been widespread happenings, across the country, that have led to long term disruption of the educational pursuits of children and youths. These children and youths, in most instances, are either overage to continue schooling from where they stopped or are overage to start schooling from the foundation class (Primary 1). Incidentally, this group of children are found in many parts of the country.

Addressing this situation required the articulation of a special form of educational programme that will meet the peculiar circumstance of these children in this category. Whereas pockets of efforts have been made towards addressing the challenge, Nigeria lacks a strategically designed educational programme and curriculum standards that suits the peculiarities of children in this category. Understandably, some non-governmental organizations have attempted to provide some interventions in this regard but these they had been done without a nationally established framework and curriculum standards.

Importantly, the Ministerial Strategy Plan (2018- 2022) had clearly identified containing the menace of out-of-school children as one of the 10 pillars of the programmes targeted at bringing about change the Nigerian education sector.

The above scenario informed the need for the development of a national accelerated education curriculum with the overarching objective of providing a catchup educational programme suitable for the educational needs of out-of-school children, and in the process mainstream them to formal school programme or provide them with alternative career path through enrolment into vocational training centres, after completing basic education. The intention to develop the curriculum arose also because of the need to provide a national curriculum standard that can be used in all states of Nigeria, where there are such peculiarities.

The Nigeria Accelerated Education Programme (NAEP) specifically targets out-of-school children between ages 10 and 18 who were in school but had their education interrupted and are overage to continue schooling from where they stopped and; those who have never been to school and are overage to start formal education from the foundation class (Primary 1).
The NAEP is structured into 3 Levels as exemplified below:

- Level 1 (Stage 1 -3) to cover the curriculum contents of Primary 1 – 3
- Level 2 (Stages 1 -3) to cover the curriculum contents of

Primary 4 – 6

- Level 3 (Stages 1 – 3) to cover the curriculum contents of JS1 -3.

Each level will run for one academic year of 3 terms, similar to the regular school programme but with a flexible timetable in learner-friendly centres. The structure is further explained in the table below: **Level Target group** Level 1

- Those who have never been to school aged 10 and above Level 2
- Those who have been to school up to primary 2 or 3 but dropped out due to one reason or the other. Level 3
- Those who have been to school up to primary 5 or 6 but dropped out due to one reason or the other.

Five subjects were selected for the implementation of the programme. These are: English Studies, Mathematics, Basic Science and Technology, Nigerian History and Values and one Nigerian Language (Hausa, Igbo and Yoruba, in the interim).

The development of the Accelerated Basic Education Curriculum involved a systematic procedure in which the 9-Year Basic Education Curriculum (for the selected subjects) was condensed into a 3-Year accelerated basic education curriculum without compromising the quality.

NERDC's four-stage approach to curriculum development was adopted in the process. These are:

i. Planning, which involves concepts and strategy formulation,
ii. Writing (crafting) of the initial draft of the curriculum document;
iii. Critique of the draft curriculum document; and
iv. Editorial and finalization of the curriculum document.

Teacher's Guide, with detailed and well sequenced contents, instructional strategies and assessment procedures is also developed to strengthen teachers' capabilities to effectively teach the curriculum.

It is my delight to acknowledge the role played by Plan International and Save the Children International in the development of the curriculum under the European Union funded project: The EU Response, Early Recovery and Resilience in Borno State: Education Component.
My appreciation also goes to all our resource persons for their efforts, expertise and commitment to the success of the project. It is my deepest conviction that the use of this curriculum will be of immense benefit to the nation in the bid to addressing the problem of out-of-school children in Nigeria.

PROF. ISMAIL JUNAIDU
Executive Secretary, NERDC

Introduction

The Accelerated Basic Education Programme (ABEP) is a catchup education programme meant to take care of the educational needs of overage children and youths between the age 10 and 18 who for certain reasons could not enroll into regular school or had their educational programmes interrupted. The Philosophy for ABEP, like the overall philosophy of Nigeria education; is to develop the individual into a sound and effective citizen and the provision of equal opportunities for the acquisition of appropriate levels of literacy, numeracy, manipulative, communicative and life-skills; as well as the ethical, moral, security and civic values needed for laying a solid foundation for life-long learning. On a more specific note, the ABEP is designed to mop-up (or reduce to the barest minimum) and bring back to school the large number of out-of-school children spread across many parts of Nigeria. The programme targets two categories of these children. These are:

- Children and youths whose education programme were interrupted and are overage to continue schooling from where they stopped.
- Children and youths who have never been to school and are overage to start formal education from the foundation class (Primary 1).

The ABEP, which is unique in all its ramifications, is to be implemented in 3-Levels comprising:

- Level 1 equivalent of Primary 1 - 3
- Level 2 equivalent of Primary 4 - 6
- Level 3 equivalent of JS 1- 3

In each of these levels, learners are expected to acquire basic education competencies equivalent to their mates in the regular school programme.

Given the uniqueness of the programme, it became imperative to redesign and condense the 9-Basic Education Curriculum in such a manner as to meet the peculiarities and needs of the intended beneficiaries of ABEP without compromising quality. Thus, the Accelerated Basic Education Curriculum (ABEC) is developed to provide the recipients unique learning experiences that will enable them to acquire basic knowledge, skills and competencies sufficient for mainstreaming and coping with the curriculum contents in the formal school system.

The objectives of the Basic Science and Technology Curriculum for ABEP are to:

1. cultivate in the learners the scientific culture of enquiry and critical thinking;
2. engender in the learners the ability to effectively manipulate objects and materials in their environment;
3. enable the learners demonstrate satisfactory levels of familiarity with their environment;
4. help the learners acquire the fundamental knowledge of science on cause and effect relationship among phenomenon;
5. develop the learners' science process skills for future undertaking in science and technology.

The thematic approach was adopted in the selection of the contents and learning experiences in the curriculum. These contents are organized uThe curriculum has been further scoped and sequenced into lesson topics for ease of implementation at the ABEP learning

Level	Theme
1	Learning about the environment
	Health, sports and games
	You and energy
	Understanding basic technology
2	Learning about the environment
	Health, sports and games
	You and energy
	Understanding basic technology
3	Learning about the environment
	Health, sports and games
	You and energy
	Understanding basic technology

centres. For the purpose of implementation, 3 hours a week has been dedicated to the teaching and learning of the Basic Science and Technology Curriculum contents. Thus, Basic Science and Technology shall be taught 3 times a week in ABEP learning centres.

Teacher's Guide has also been developed to further support the effective implementation of the curriculum by both teachers and policy makers. It is therefore recommended that the curriculum be implemented with due reference to the teacher's guide. Finally, it is envisaged that education managers, teachers, Development Partners and other stakeholders will provide the necessary infrastructure and support required for the actualization of the objectives of the curriculum.

Dr. Garba D. Gandu
Director, Curriculum Development Centre, NERDCnder 4 themes at each Level as shown in the table below:

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ACCELERATED BASIC EDUCATION CURRICULUM

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Non-living Components of the Environment	Learners should be able to: 1. define rock as the hardcore part of the earth crust; 2. observe samples of different types of rock; 3. describe the different types of rocks: igneous, metamorphic and sedimentary rocks; 4. discuss the uses of rocks; 5. identify the location of landmark rocks in Nigeria.	1. Rocks • Meaning and types of rocks - Igneous - Sedimentary - metamorphic • Uses of rocks • Landmark rocks in Nigeria: - Olumo - Zuma - Aso - Kufena, etc.	1. Leads learners through questioning to accurately define rock. 2. Requests the learners to bring different types of rocks to the class. 3. Brings different samples of rock of different types to class for learners to observe. 4. Leads the learners to: • describe each rock sample correctly, • enumerate uses of rocks in the community, • name and identify the location of land mark rocks in Nigeria.	1. Bring to class samples of rocks from their homes and communities. 2. Responds to teachers leading questions. 3. Observe and describe the samples of rocks 4. Differentiate the types of rocks 5. Enumerate the uses of rock in the community.	• Sample of different types of rocks • Samples of soils as products of degradation of rocks • Charts and pictures of rocks • Internet picture of rocks.	Learners to: 1. explain the meaning of rock; 2. state the differences between different types of rocks; 3. state the uses of rocks; 4. name the landmark rocks in Nigeria and their locations.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
2. Changes in Nature	Learners should be able to: 1. define change in nature; 2. recognise temporary and permanent changes in plants and animals; 3. discuss growth and developmental changes in plants and animals; 4. group changes in plants and animals as reversible and irreversible changes.	1. Meaning of change in nature 2. Types of changes in nature: • Temporary Changes in: - **animals** e.g. change of colour to adapt and hide from predators in lizard, chameleon, butterfly and snakes, etc. - **plants** e.g. some plants fold their leaves in the evening and open up in the morning, plants releasing sweet smelling scents at night, etc. • Permanent changes in nature e.g. - growth and developmental changes in animals like the life cycle of animals; - growth and developmental changes in plants like the life cycle of plants, shedding of leaves in plants, etc.	1. Asks learners to bring to class potted plants and some, flowers, seeds and fruits. 2. Brings to class the young of a lizard and insect (caterpillar or pupa) or tadpole. 3. Leads learners to discuss changes in plants and animals due to development and growth. 4. Leads learners to describe the life cycle of plants: e.g. germination of seed grows into big plant which grows and gets flowers, bears fruits/ seeds; which when put in soil will germinate into a new plant.	1. Bring to class all resources that the teacher directs them to bring. 2. Participate in class activities. 3. Discuss developmental changes in plants and animals 4. Group changes in plants and animals as: • temporary and permanent changes • reversible and irreversible changes. 5. Respond to teachers' questions and carry out all assignments.	• Viable Seeds young plants/ seedlings, tad poles. • Film loops, DVD on growth and developmental changes in plants and animals.	Learners to: 1. define change; 2. discuss types of changes in nature; 3. recognise growth changes in animals and plants as permanent changes; 4. give examples of temporary changes in plants and animals.
3. Changes in Non-Living	Learners should be able to: 1. describe	Examples of Changes in Non-Living things:	1. Brings pictures, charts, video clips that show	1. Watch teacher present pictures, charts and video	• Firewood, paper, candle, sticks of	Learners to: 1. identify changes in

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
Things	changes in non-living things in the environment; 2. classify changes in non-living things as temporary/ reversible changes and permanent/ irreversible changes.	1. Reversible/ temporary changes in non-living things e.g. • sunshine • day break • night fall • rainbow • eclipses • seasons • moon phases, etc. 2. Irreversible/ permanent changes in non-living things e.g. erosion • desertification • earthquakes, • volcanic eruptions, • climate change, etc.	various changes in nature like gulley erosion, moon phases, rainbow, etc. 2. Takes the learners to erosion site to show sheet erosion, gulley erosion, etc. 3. Uses video clips or resources from the internet showing earthquakes, volcanic eruption, etc. and guides learners to: • identify irreversible changes in non-living things • group changes in nature into permanent and temporary changes.	clips of reversible and irreversible changes in nature. 2. Visit erosion sites to observe changes caused by sheet and gulley erosion. 3. Watch films on earthquakes, volcanic activities to learn about natural changes in the environment. 4. Group environment changes as: • Temporary and permanent changes Reversible and irreversible changes	matches • Film loops, DVD on climate changes, eclipses, moon phases, rainbow, volcanoes, earthquakes, etc.	non-living things; 2. group changes in non-living things as: • Temporary and permanent changes • Reversible and irreversible changes. 3. recognise some natural disasters as irreversible changes in nature volcanic eruption, earthquakes.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: HEALTH, SPORTS AND GAMES **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Physical Fitness and body Conditioning	Learners should be able to: 1. explain the meaning of physical fitness and body conditioning; 2. identify the components of physical fitness and body conditioning; 3. perform physical fitness and body conditioning exercises; 4. explain the benefits of physical fitness and body conditioning.	1. Meaning and importance of physical fitness and body conditioning. 2. Physical Fitness Components and body conditioning: • Endurance: e.g. press-ups, minute-run, walking, bench step on and off, squat thrust, etc. • Strength: e.g. pull-ups, sit-ups, etc. • Agility: e.g. 10 metre shuttle-run • Power: e.g. sergeant jump, standing broad jump, etc. • Flexibility: e.g. straight-knee-toe touch, etc. • Balance (beam walk) 3. Benefits of Physical Fitness and Body Conditioning.	Guides learners to: 1. explain the meaning of physical fitness and body conditioning. 2. identify and describe physical fitness components 3. perform physical fitness and body conditioning exercises. 4. discuss the benefits of physical fitness and body conditioning.	1. Note the explanations of the teacher; 2. Participate in class discussion. 3. Practice and perform various physical fitness and body conditioning exercises under the guidance of the teacher. 4. Ask and answer questions. 5. Take down notes.	• Pictures of physical fitness exercise postures • Posters showing physically fit persons. • Pictures • Charts • Video clips	Learners to: 1. describe the concepts of physical fitness and body conditioning; 2. list five components of physical fitness; 3. carry out the various physical fitness exercises; 4. state three benefits of physical fitness and body conditioning.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: HEALTH, SPORTS AND GAMES **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Accidents	Learners should be able to: 1. state the meaning of accidents; 2. explain the causes of accidents in the home, school, farm, community, etc.; 3. identify the preventive measures of accidents.	1. Meaning of accidents 2. Causes of accidents in the home, school, farm, community, etc. 3. Preventive measures of accidents.	1. Guides learners to state the meaning of accidents; 2. Explains the causes of accidents in the: • Home • School • Farm • Community, etc. 3. Guides learners to identify the preventive measures of accidents.	1. Take down notes as the teacher explains the meaning of accidents 2. Ask and answer questions on causes of accidents in the home, school, farm and community. 3. Participate in class discussion as the teacher identifies preventive measures of accidents in home, school, farm and community.	• Picture showing different types of accidents. • Charts and video clips showing causes of accidents • Slides and film strips.	Learners to: 1. explain the meaning of accidents; 2. state 4 causes of accidents; 3. outline 4 preventive measures of accidents.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: HEALTH, SPORTS AND GAMES **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
3. Road Traffic Accidents	Learners should be able to: 1. explain the meaning of road traffic accidents; 2. discuss the causes of road traffic accidents; 3. describe ways of preventing road accidents.	1. Meaning of road traffic accidents 2. Causes of road traffic accidents. 3. Preventive measures for road accidents: • Traffic control • Vehicle maintenance • Road maintenance • Public education.	1. Invite a resource person from the Federal Road Safety Corps (FRSC) to give learners a talk on road traffic accidents. 2. Guides the learners to explain the meaning of road traffic accidents. 3. Leads learners to discuss the causes of road traffic accidents. 4. Initiates a class discussion on ways of preventing road traffic accidents.	1. Listen to guest talk. 2. Identify and discuss the causes and ways of preventing road traffic accidents. 3. Ask and answer questions on causes of road traffic accidents. 4. Take down notes.	• Film show on causes of road traffic accidents. • Pictures showing victims of road traffic accidents.	Learners to: 1. define road traffic accidents; 2. state five causes of road traffic accidents; 3. enumerate ways of preventing road traffic accident.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: HEALTH, SPORTS AND GAMES **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
4. Safety Measures for Road Traffic Accidents	Learners should be able to: 1. discuss the road safety guidelines for the: pedestrians, cyclist, motorists, animals, etc. 2. explain the consequences of not observing road safety guidelines.	1. Safety guidelines for: • Pedestrians • Cyclist • Motorists • Animals 2. Consequences of not observing road safety guidelines.	1. Leads learners to discuss: • safety guidelines for pedestrians, cyclists, motorists, animals, etc. • the consequences of not observing road safety guidelines. 2. Take learners out of class to practice how to cross and walk along the road safely.	1. Participate in discussing road safety guidelines for: • Pedestrians • Cyclists • Motorists • Animals, etc. 2. Practice crossing and walking on safely on roads. 3. Take down notes as the teacher explains the consequences of not observing road safety guidelines.	• Pictures of the: Pedestrians Cyclists, Motorists Animals, etc. crossing the road safely. • Pictures of pedestrians crossing the road with animals safely. • Charts showing the motorists and cyclists using the roads safety. • Slides and films showing learners observing road safety guidelines.	Learners to: 1. discuss 2 road safety guidelines each for the: • pedestrians • cyclists • motorists • animals, etc. 2. explain 4 consequences of not observing road safety guidelines.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: YOU AND ENERGY **LEVEL 2**

STATGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Basic Electricity	Learners should be able to: 1. explain the meaning of electricity; 2. identify different types of electricity; 3. discuss the sources of static and current electricity; 4. state the uses of electricity.	1. Meaning of electricity. 2. Types of electricity: • Static • current electricity 3. Sources of electricity: • 4. Uses of electricity	Guide learners to: 1. deduce the meaning of electricity; 2. carry out simple experiments to illustrate static and current electricity 3. identify the types and sources of electricity responsible for what they observed; 4. discuss the uses of electricity.	1. Do the following to generate static or current electricity: • Rub one end of a comb on their hair or sweater and try using the comb to pick the following: piece of paper, office pins, plastic balls, etc. • Blow up some balloons; and rub the balloons on their hair or sweater for about 2 seconds; and then try sticking the balloons to the wall of the classroom. • Connect one end of a wire to a bulb and then connect the other end of the wire to one terminal of a battery. Place the bulb on the other end of the battery terminal. 2. Observe and discuss the outcomes of their experiments.	• Combs • Learners hair • Woolen sweaters • Pieces of paper, Pieces of thread, Pins, plastic ball, etc. • Balloons • Torchlight Bulbs • Wires • Torchlight batteries.	Learners to: 1. identify two (2) types of electricity; 2. illustrate the existence of static and current electricity; 3. list sources of electricity; 4. mention four uses of electricity.

THEME: YOU AND ENERGY **LEVEL 2**

<table>
<tr><th colspan="6">STAGE 1</th></tr>
<tr><th rowspan="2">TOPIC</th><th rowspan="2">PERFORMANCE OBJECTIVES</th><th rowspan="2">CONTENT</th><th colspan="2">ACTIVITIES</th><th rowspan="2">TEACHING AND LEARNING RESOURCES</th><th rowspan="2">EVALUATION GUIDE</th></tr>
<tr><th>TEACHER</th><th>LEARNERS</th></tr>
<tr>
<td>2. Conductors and Non-conductors of electricity.</td>
<td>Learners should be able to:
1. explain the meaning of the terms, conductors and non-conductors of electricity;
2. group things as conductors and non-conductors of electricity;
3. describe the uses of:
• electric conductors
• non-conductors (insulators).</td>
<td>1. Meaning and examples of conductors and non-conductors (insulators) of electricity.
2. Uses of electric conductors and insulators.</td>
<td>1. Uses simple experiments to help learners:
• deduce the meaning of conductors and non-conductors (insulators) of electricity
• identify conductors and non-conductors of electricity
• describe the uses of electric conductors and insulators.
2. Displays the chart of things in the environment and let learners classify the things in the chart as conductors and non-conductors of electricity.
3. Guide learners to tabulate their work.</td>
<td>1. Carry out simple experiments to deduce the meaning of conductors and non-conductors of electricity.
2. Group materials in the environment as conductors and non-conductors of electricity.
3. Participate in class discussions.
4. Tabulate their work as shown below:
<table>
<tr><th rowspan="2">S/ No.</th><th colspan="2">Things in the Environment</th></tr>
<tr><th>Conductors</th><th>Non-conductors</th></tr>
<tr><td>1</td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td></tr>
<tr><td>4</td><td></td><td></td></tr>
<tr><td>5</td><td></td><td></td></tr>
</table>
</td>
<td>• Common objects and things found in the learners' environment
• Pieces of paper, Pieces of thread, pins, plastic ball, etc.
• Torchlight Bulbs
• Wires.</td>
<td>Learners to:
1. define the terms: conductors and non-conductors of electricity;
2. group materials as conductors and non-conductors of electricity;
3. state the uses of electric conductors.</td>
</tr>
</table>

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING Resources**	**EVALUATION GUIDE**
			TEACHER	**LEANERS**		
1. Simple Machines	Learners should be able to: 1. explain the meaning of simple machines with examples; 2. group simple machines as levers, pulleys and inclines planes; 3. state uses of simple machines.	1. Meaning and examples of simple machines 2. Classification of simple machines: • Levers • Pulleys • Inclined Planes 3. Uses of simple machines.	1. Guides learners to explain the meaning and give examples of simple machines. 2. Displays samples of simple machines for learners to examine; identify, name and group into classes. 3. Initiates and guides learners to discuss the uses of simple machines.	1. Collect, examine, identify and classify simple machines. 2. Participate in class discussion. 3. Ask and answer questions. 4. Copy chalkboard summary.	• Scissors • Brooms • Spoon • Hoe • Cutlass • See-saw • Elevator • Carpenter's plane • Carpenter's wedge • Slopped surface	Learners to: 1. define simple machine and give 3 examples 2. classify simple machines; 3. state 3 uses of simple machines.

THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNER**		
2. Levers	Learners should be able to: 1. recognise examples of levers amongst common household tools; 2. identify the parts of a lever; 3. group levers into classes; 4. state the uses of levers.	1. Examples of Levers 2. Parts of a lever 3. Classification of levers 4. Uses of levers.	1. Collects examples of levers for learners to identify, name and group. 2. Guides learners to identify parts of lever.	1. Collect and identify some simple machines. 2. Take turns to play with lever, e.g. the see-saw and explain how it works. 3. Make and use simple lever. 4. Draw the different types of lever and identify the parts. 5. List common uses of levers.	• Bottle opener • Can opener • Scissors • Pliers • Charts and diagrams of some common levers • Nut cracker	Learners to: 1. name five common levers and machines in their homes; 2. locate the Pivot, Load and Effort arms in common lever machines; 3. state five common uses of levers.
3. Pulleys	Learners should be able to: 1. recognize and identify simple pulley machines; 2. identify and	1. Types of Pulleys • fixed • movable. 1. Examples of pulley machines.	1. Guides and helps in the collection of simple pulley machines. 2. Guides learners	1. Collect simple pulley machines 2. Identify the application of pulleys	• Strings • Metal/ wooden/plastic rollers • Nails	Learners to: 1. give three examples of simple pulleys; 2. state two applications of

THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNER**		
	describe the different uses of pulley machines in everyday life; 3. distinguish between fixed and movable pulleys; 4. make and use pulley machines to do work.	2. Common applications of pulleys e.g. in elevators, cranes, etc.	to identify the application of pulleys. 3. Guides learners to construct and use pulleys. 4. Takes the class on visits to places where they can observe the application of pulleys.	3. Examine and observe pulleys at work. 4. Construct simple pulleys 5. Use pulleys to lift loads	• Wood • Charts showing uses of simple pulleys • Simple pulleys	pulley machines 3. differentiate between fixed and movable pulleys; 4. construct and use pulleys.
4. Inclined Plane	Learners should be able to: 1. mention examples of inclined plane; 2. construct and use inclined plane to lift loads; 3. state the advantages of inclined plane.	1. Examples of inclined plane 2. Advantages of inclined planes.	1. Guides learners to give examples of inclined plane. 2. Arranges for learners to visit construction sites to observe the use of inclined plane. 3. Guides the class to discuss the	1. List examples of inclined planes. 2. Use planks to make inclined plane. 3. Observe the use of inclined plane at construction sites 4. Participate in the	• Wooden plank. • Charts showing inclined plane e.g. staircases, ramps, etc. • Cement blocks • Drums • Nails • Saw	Learners to: 1. mention three examples of inclined plane; 2. construct and use inclined plane to move objects; 3. state two advantages of inclined plane.

THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNER**		
			advantages of inclined plane.	discussion of the advantages of inclined plane	• Hammer	
5. Computer Software	Learners should be able to: 1. explain the meaning of computer software; 2. identify different types of computer software; 3. state the uses of the computer software.	1. Meaning of computer software. 2. Types of computer software. 3. Uses of computer software.	Guides learners to: 1. explain the meaning of computer software; 2. explore and list the software in a computer system; 3. state the uses of various software.	1. Listen to teacher's explanations, ask and answer questions. 2. Identify computer software. 3. Discuss the uses of computer software.	• The computer system	Learners to: 1. define computer software; 2. identify the software in a computer system; 3. state the uses of computer software.
6. Computer Application Packages	Learners should be able to: 1. identify computer application packages with examples;	Meaning and examples of computer application packages e.g. MSWord, Excel, Paint Artist, etc.	1. Guides learners to explore a computer system and make a list of application packages in	1. Explore a computer system to identify the application packages in the system.	The computer system • Samples of Application Software.	Learners to: 1. name three computer application packages; 2. explain the uses of

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THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNER**		
	2. state the uses of the computer application packages.	2. Uses of computer application packages.	the computer system. 2. Demonstrates and guides the class to discuss the uses of the application packages.	2. Discuss the uses of computer application packages.		computer application software.

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Weather and Climate	Learners should be able to: 1. state the meaning of weather and climate; 2. differentiate between weather and climate; 3. identify the elements of weather; 4. relate the current weather to changes in the weather elements; 5. identify standard weather instruments; 6. draw the weather symbols;	1. Meaning of weather and climate 2. Elements of the weather: • Sun shine • Cloud cover • Wind • Temperature • Humidity • Rainfall. 3. Weather Instruments: • Wind vane • Rain Gauge • Thermometer • Barometer. 4. Weather Symbols: • Sun shine • Rainfall • Cloud • Storm.	1. Brings into the class various weather instruments like the Thermometer, Barometer, Rain Gauge, Wind Vane, Anemometer, Maximum and Minimum Thermometer. 2. Leads learners to: • define weather and climate, • describe the current weather of the moment or the day, • make a list of elements of the weather, • explain how and	1. Watch video clip to deduce the meanings and relationship between weather and climate. 2. Discuss in small groups the elements of weather. 3. Describe the weather of their immediate community. 4. Identify and name the weather instruments presented by the teacher. 5. Ask and answer questions. 6. Draw weather symbols.	• Weather instruments: Rain gauge, Wind Vane Thermometer, Anemometer, Maximum and Minimum Thermometer. • Charts on weather symbols, and weather conditions • Video clips on weather of some places • Meteorological station. • Materials for drawing and painting (paper, pencil, crayon, paper tape).	Learners to: 1. define weather and climate; 2. state the differences between weather and climate; 3. list the elements of the weather and climate; 4. identify standard instruments for assessing weather conditions; 5. draw weather symbols; 6. keep a three (3) week record the weather conditions in

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
	7. keep weather records.	5. Keeping weather Records: • Humidity • Temperature • Rainfall • Wind • Cloud • Storm. 5. Keeping weather Records: • Humidity • Temperature • Rainfall • Wind • Storm • Cloud. 6. Measuring weather conditions: • Temperature • Rainfall • Wind speed and direction • Humidity • Visibility.	why the weather elements control the weather of a place • explain how the weather conditions determines the climate of a place. 3. Guides learners to: • draw weather symbols • use weather instruments like the thermometer, wind vane, rain gauge, etc effectively • keep weather records of their community.	7. Keep weather records.		their immediate community.

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THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
2. Global Warming and Climate Change	Learners should be able to: 1. define global warming and climate change; 2. explain the causes of global warming; 3. describe the effects of global warming on climate change; 4. discuss strategies for preventing global warming; 5. discuss strategies for preventing global warming and climate change.	1. Meaning of Global warming and climate change. 2. Causes of global warming. 3. Effects of global warming on climate change. 4. Prevention of global warming and climate change.	1. Brings to class charts and video clips of melting glacier, coastal erosion, excessive rainfall and flash floods, etc. caused by global warming and climate change. 2. Coordinates learners' small group discussions on the meaning of global warming and climate change. 3. Leads learners to brainstorm on the: • effects of global warming and climate change; • methods of preventing global warming and climate change.	1. Read documents and charts provided by the teacher. 2. Discuss their experiences on issues related to global warming and climate change. 3. Participate in class group discussions 4. Take action with their communities to prevent global warming and climate change, e.g. tree planting, prevention of deforestation, use of kerosene, coal and cooking gas for domestic purposes instead of fuel wood or wood charcoal.	• Charts • Video clips, • Map • Pictures of dried environment, coastal erosion, melting ice/glaciers, tornadoes, wild fires, desertification, flash floods, dried river basins, etc.	Learners to: 1. explain the meaning of global warming and climate change; 2. describe the causes of global warming; 3. mention five (5) evidences of global warming; 4. describe the effects of global warming on climate change; 5. discuss the strategies for preventing global warming and climate change.

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THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
3. Environmental Degradation	Learners should be able to: 1. state the meaning of environmental degradation; 2. discuss the sources of environmental degradation; 3. explain the causes, effects and ways of preventing flooding; 4. discuss erosion as a source of environmental degradation; 5. identify causes of erosion, its effects and preventive measures;	1. Meaning of environmental degradation 2. Sources of environmental degradation: • Flooding: - Causes - Effects - Prevention • Erosion: - Causes - Effects - Prevention • Desertification: - Causes - Effects - Prevention • Wastes and Waste Disposal. 3. Consequences of environmental degradation.	1. Provides pictures, charts, video clips on various forms of environmental degradation 2. Leads learners to correctly define environmental degradation 3. Puts learners into small groups to identify and discuss sources of environmental degradation. 4. Leads learners in their groups to define and discuss flooding it as agent of environmental degradation.	1. Provide all resources requested by the teacher e.g. Newspaper and magazine cuttings on environmental degradation, waste disposal, tree planting campaigns etc. 2. Participate in all class activities planned for learning about environmental degradation 3. Participate in excursions to sites of environmental degradation 4. Carry out home assignments on environmental	• Charts • Pictures • Video clips • Newspaper and magazine cuttings, • Visits to erosion sites, waste dump sites, places of overgrazing, developing arid zones, gas flaring, industrial chimneys, etc.	Learners to: 1. explain the meaning of environmental degradation; 2. discuss the sources of environmental degradation; 3. state two (2) causes each of flooding, erosion, deforestation and desertification; 4. describe their effects and preventive measures; 5. explain the consequences of poor waste disposal methods and

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 1						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
	6. relate environmental degradation to: • climatic factors • waste management methods; 7. proffer effective ways to prevent environmental degradation.	4. Preventing environmental degradation.	5. Initiates and guides learners to discuss: • erosion, desertification, waste and waste disposal methods as agents of environmental degradation • their causes and effects on the environment • ways of preventing erosion, desertification and environmental degradation.	degradation 5. Carry out investigation of the community to identify areas of erosion and other forms of environmental degradation		and gas flaring on the environment; 6. suggest effective ways of preventing environmental degradation.
4. Environmental Management	Learners should be able to: 1. define environmental management and recycling; 2. describe the methods for	1. Meaning of environmental management 2. Environmental management methods: • Recycling: - Meaning,	1. Leads learners to discuss the meaning of environmental management and recycling. 2. Takes learners to a recycling plant in	1. Participate in class activities related to environmental management. 2. Join in the excursion to a recycling plant	• Charts pictures and video clips on waste recycling, environmental management and conservation.	Learners to: 1. state the meaning of environmental management 2. discuss the importance of waste

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THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
	recycling plastics; glass and metals; 3. state the economic importance of recycling waste materials; 4. identify domestic and industrial wastes; 5. suggest safe ways of managing industrial and domestic wastes; 6. explain the concept of conservation; 7. identify methods of conservation; 8. name the agencies responsible to	- Methods, and - Importance of recycling of waste • Waste management: - Meaning of waste management - Waste management methods for domestic and industrial wastes. • Environmental conservation: - Meaning - Conservation methods - Importance of environmental conservation land and forest	the community and guides them explain the: • various methods of recycling waste • importance of waste recycling as an environmental management method. 3. Provides video clips and documentaries on: • domestic and industrial waste management processes • environmental conservation methods. 4. Initiates and guides learners to discuss the: • meaning of waste management • methods of managing domestic	3. Join community based anti-deforestation campaigns, as well as reforestation campaigns. 4. Respond to various questions during lessons on environmental management 5. Participate in the management of their own domestic wastes. 6. Discuss soil and water conservation methods used in their communities. 7. Identify industrial wastes that contribute much to	• Educational sites and places like seedling nursery farms, forest reserves, recycling plants; waste collection points, waste sales point, etc.	recycling in the Nigerian economy 3. explain what people do with waste plastic materials and metal scraps which they collect. 4. explain ways of managing domestic wastes in crowded places 5. define conservation; 6. describe various methods of conservation; 7. list the agencies responsible for environmental conservation and

THEME: LEARNING ABOUT THE ENVIRONMENT **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
	environmental conservation and management in Nigeria.	- Agencies responsible for environmental conservation and management in Nigeria.	and industrial wastes • meaning of environmental conservation • conservation methods for: - Soil conservation - vegetation conservation - water conservation, - forest conservation - species conservation and the importance of biodiversity	problem of the environment, such as gas flaring in the petroleum industry, effluent gases in coal or diesel powered industries.		management in Nigeria.

THEME: HEALTH SPORTS AND GAMES **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Emergencies, Disasters, Conflicts and Crisis.	Learners should be able to: 1. explain the meaning of emergencies, disasters, conflicts and crisis; 2. distinguish between emergencies, disasters, conflicts and crisis 3. discuss appropriate responses in emergencies, disasters, conflicts and crisis.	1. Meaning of emergency, disasters, conflicts and crises. 2. Causes of emergencies, disasters, conflicts and crisis 3. Responding to emergencies, disasters, conflicts and crisis: • Calmness • Recognizing early warning signs, etc.	1. Invites a guest speaker from NEMA to give a talk on safety precautions in times of emergency, disasters, conflicts and crises. 2. Guides learners to: • explain the meaning of emergencies, conflicts and crisis • discuss the causes of emergency, disasters, conflicts and crises • identify early warning signs of emergencies, conflicts and crisis situations. • describe appropriate safety measures for emergency, disasters, conflicts and crises.	1. Listen to the guest talk. 2. Participate in class discussion. 3. Ask and answer question. 4. Take down notes.	• Charts, pictures and Video clips of emergency, disasters, conflicts and crises situations. • Charts, pictures and Video clips of workers responding to emergencies. • Guest speaker.	Learners to: 1. define emergencies, disasters, conflicts, crisis; 2. state the differences between emergencies, disasters, conflicts and crisis; 3. identify 3 early warning signs of emergencies, conflicts and crisis situations; 4. describe appropriate responses for emergency, disasters, conflicts and crises situation.

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THEME: HEALTH SPORTS AND GAMES **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
2. Preventing Emergencies, Disasters, Conflicts and Crisis	Learners should be able to: 1. give reasons for avoiding emergency, disasters, conflicts and crises situations; 2. discuss ways of preventing emergency, disasters, conflicts and crises situations; 3. discuss importance of the rule of law in disasters, conflicts and crisis situations; 4. explain consequences of not obeying laws in conflicts and crisis situations.	1. Avoiding emergency, disasters, conflicts and crises situations. 2. Respect for rule of law, etc.	Guides learners to: 1. explain reasons for avoiding conflicts and crisis situations. 2. discuss importance of the rule of law in conflict and crisis situations. 3. state the consequences of not obeying laws in emergencies, conflicts and crisis situations.	1. Participate in discussing the role of the rule of law in emergencies, conflicts and crisis situations. 2. Ask and answer questions on the consequences of not obeying laws in emergency, disasters, conflicts and crises situations. 3. Listen and take down notes.	• Video clips • Pictures • Charts	Learners to: 1. explain 3 reasons why conflicts and crisis should be avoided; 2. discuss the importance of respecting the rule of law in preventing emergency, disasters, conflicts and crises; 3. discuss the consequences of lawlessness in emergency, disasters, conflicts and crises.

THEME: HEALTH SPORTS AND GAMES **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
3. Keeping Safe During Emergencies, Conflicts and Crisis.	Learners should be able to: 1. discuss the roles and responsibilities of government in evacuation when emergency, disasters, conflicts and crises occur; 2. explain the roles and responsibilities of governments in giving support and protection during emergencies, conflicts and crises; 3. outline the roles and responsibilities of government in the rehabilitation of victims.	1. Roles and Responsibilities of Governments during emergency, disasters, conflicts and crises: • Evacuation • Support • Protection • Rehabilitation, etc.	1. Guides learners to discuss the roles and responsibilities of government in evacuation when emergencies occur. 2. Guides learners to outline the roles and responsibilities of government in providing support and protection to victims. 3. Explains the roles and responsibilities of government in rehabilitation when emergencies occur.	1. Ask and answer questions. 2. Listen and take down notes. 3. Participate in discussing the role and responsibilities of government in providing protection and support for victims. 4. Participate in classroom discussion on the roles and responsibilities of government in the rehabilitation of victims.	• Pictures • Charts • Video clips showing actions of government during emergency, disasters, conflicts and crises.	Learners to: 1. discuss 3 roles and responsibilities of governments in evacuation of victims; 2. explain 2 roles and responsibilities of government in giving supports and protection to victims of emergency, disasters, conflicts and crises; 3. describe 3 roles and responsibilities of government in the rehabilitation of victims.

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THEME: YOU AND ENERGY **LEVEL 2**

STAGE 2

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
1. Electric Circuits	Learners should be able to: 1. define electric circuits; 2. discuss the components of electric circuits; 3. make a simple electric circuit; 4. explain how electricity travels (conducted) from one point to another; 5. discuss the uses of electric circuits.	1. Meaning and Terminologies e.g. • source • load • return • terminals (positive and negative) • key • open and closed circuits, etc. 2. Components of electric circuits: • Batteries • wires, • bulb • key, etc. 3. Electricity flow and pathway 3. Uses of electric circuits: • supply electricity to houses • control electricity	1. Uses simple experiments, demonstrations and video simulations and guides learners to: • deduce the meaning of electric circuits, source, load, return, key, terminals, open and closed circuits • identify the components of electric circuits, • describe the path for electricity flow. 2. Provides torchlight batteries, bulb and wires and guides learners to:	1. Watch teacher demonstrations and video simulations of the path which electric currents flow. 2. Perform simple experiments to deduce the meaning of electric circuits; and identify the source, load and return/earth in an electric circuit. 3. Use a simple dry cell (Battery), wires, and a light bulb to make a simple electric circuit. 4. identify components of	• Torchlight batteries • Light bulbs, • Connecting wires • Circuit board • Lamp holders • Switch key	Learners to: 1. explain the following: electric circuits, source, load, return/ earth, key, terminals, open and closed circuits; 2. list the components of electric circuits; 3. describe the flow path/ movement of electricity in a circuit; 4. make a simple electric circuit; 5. draw and label an

THEME: YOU AND ENERGY **LEVEL 2**

STAGE 2

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
		• distribute electricity • safe use of electricity.	• set up a simple electric circuits; • identify the source, load and return on their electric circuits; • draw and label their electric circuit.	an electric circuit. 5. draw and label electric circuits.		electric circuit; 6. state the uses of electric circuits.
2. Types of Electric Circuits	Learners should be able to: 1. explain the meaning of series and parallel circuits; 2. identify their components; 2. distinguish between series and parallel circuits; 3. draw and label series and parallel circuit diagrams;	Series and parallel circuits: 1. Meaning 2. Differences between series and parallel circuits. 3. Electric circuit diagrams. 4. Construction of electric circuits.	1. Uses simple experiments, demonstrations diagrams and guides learners to: • identify series and parallel circuits, • observe and describe the differences between series and parallel circuits, • draw and label series and parallel circuits. 2. Provides torchlight bulbs, batteries,	1. Watch teacher demonstrations. 2. Identify series and parallel circuits from models, pictures and diagrams. 3. Observe and discuss similarities and differences between series and parallel electric circuits. 4. Set up simple series and parallel electric circuits.	• Torch light batteries • Light bulbs, • Connecting wires • Circuit board • Lamp holders • Switch key	Learners to: 1. define series and parallel circuits; 2. state the differences between them; 3. set up series and parallel circuits; 4. sketch and label series and parallel circuits diagrams; 5. make a simple electric cell from

THEME: YOU AND ENERGY **LEVEL 2**

STAGE 2

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
	4. make a simple electric cell from fruits such as lemon, lime, orange, etc.		wires and guides learners to set up series and parallel circuits. 3. Guides and supervises learners as they make an electric cell from fruits.	5. Make a simple electric cell from lemon or lime.		lemon or lime.
3. Fuses and Circuit Breakers	Learners should be able to: 1. identify fuses, fuse ratings and circuit breakers; 2. state the functions of fuses and circuit breakers in houses; 3. read electric meter for billing.	1. Meaning of Fuse and Circuit breakers 2. Functions of fuses and circuit breakers. 3. Fuse Ratings 4. Electric meter reading and billing.	1. Provides a chart showing different types of fuses and circuit breakers. 2. Guides learners to: • identify fuses, fuse ratings and circuit breakers • discuss the functions of fuses and circuit breaker in house wiring. 3. Provides charts and guide learners	1. Observe and identify fuses and circuit breakers. 2. Set up series and parallel circuits. 3. Connect ammeter and voltmeter to the circuit and read their values. 4. State the functions of fuses and circuit breakers.	• Chart showing direction of electron flow. • Battery, connecting wires, key, rheostat, torch bulbs. • Ammeter and voltmeter • Chart of house wiring. • Chart or model of electric meter.	Learners to: 1. identify fuses and their ratings; 2. explain the functions of fuses and circuit breakers; 3. take meter reading; 4. calculate energy consumed from metre readings.

THEME: YOU AND ENERGY **LEVEL 2**

STAGE 2

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
			to practice reading of electricity meter and calculate cost of electrical energy consumed.	5. Practice reading of meters and calculation of energy consumed.		
4. Using Electricity	Learners should be able to: 1. state the basic rules for using electricity safely; 2. discuss the importance of using electricity safely; 3. explain the consequences of not obeying the safety rules.	1. Using Electricity safely: • Basic safety rules • Importance of using electricity safely. • Consequences of not obeying the safety rules.	1. Uses charts and posters to guide learners to: • deduce the basic rules for using electricity safely, • discuss the importance of using electricity safely, • state the consequences of not obeying the safety rules. 2. Make posters of the Basic Safety Rules.	1. Deduce the basic rules for electric safety. 2. Participate in class discussions. 3. Listen to teacher's explanations, ask and answer questions.	• Charts and posters on ways of using electricity safely.	Learners to: 1. explain the basic ways for using electricity safely; 2. state the importance of using electricity safely; 3. describe the consequences of not obeying the safety rules.

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THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING Resources**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. ICT Education	Learners should be able to; 1. explain the meaning of information and data 2. explain sources of information 3. explain meaning of information processing – input. process, output (IPO) model 4. explain meaning of input and output devices 5. identify input and output devices of	1. Meaning and sources of information and data 2. Meaning of information processing: The input-process-output (IPO) model 3. Meaning of input and output devices 4. Identification of input and output devices of computer and other ICT gadgets 5. Functions of input and output devices	Uses charts and pictures to lead student to: 1. explain the meaning and sources of information and data; 2. identify input and output devices of computer and other ICT gadgets and explain their functions; 3. draw and explain the IPO information processing model.	1. Participate in the discussion of meaning of information and data 2. Participate in identifying the sources of information. 3. Participate and note the meaning of information processing 4. Observe the displayed or drawn input and output devices of computer and other ICT gadgets	• Charts • Mouse • Printer • keyboard • Monitor • System units • Speakers • Video showing parts of a computer • Pictures • GSM phones	Learners to: 1. explain meaning of information and data 2. mention 3 sources of information 3. explain information processing 4. draw IPO model 5. mention 3 input and output devices and state their functions 6. demonstrate use of 3 output devices.

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THEME: UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 2						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING Resources**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
	computer and other ICT gadgets 6. explain functions of input and output devices.	6. Demonstration of use of input and output devices 7. Functions of a computer as an IPO system.				

THEME: LEARNING ABOUT ENVIRONMENT **LEVEL 2**

STAGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
			discuss the functions of the skeletal system 6. Guides the learners to visit a meat shop to find out more about mammalian skeleton/bone and joints			
2. The Circulatory System	Learners should be able to: 1. state the meaning of blood 2. describe the three main types of blood cells; 3. explain the functions of the blood cells 4. discuss the	1. Meaning of blood 2. Types of blood cells 3. Functions of blood cells 4. Blood vessels 5. The human Heart 6. The circulatory System	1. Leads learners to define blood 2. Brings to class models of the heart, blood cells, charts of the circulatory system, drawings of the circulatory system and the heart etc. 3. Leads learners to identify types of	1. Respond to teachers' questions and promptings to carry out activities 2. Discuss in small groups the nature of blood cells and their functions 3. Draw the human heart	• Models of the heart • Charts of the Circulatory system • Pictures and chart showing the heart, blood cells, blood vessels, etc. • Video clips of simulated human blood	Learners to: 1. state the meaning of blood; 2. draw the shape of two types of blood cells 3. discuss the functions of each kind of blood cells 4. explain how blood is

THEME: LEARNING ABOUT ENVIRONMENT **LEVEL 2**

STAGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. The Human Body.	The learner should be able to: 1. identify various parts of the human body; 2. identify parts of the human body that are bones; 3. state types of bones in the human body; 4. discuss the types of joints in the human body; 5. draw and label some bones and joints of the body; 6. describe the functions of the skeleton in the human body.	1. Parts and functions of the human body 2. Types of bones of the body, 3. Joints in the human body 4. The skeletal system 5. Functions of the human skeleton	1. Guides the learners to identify the parts of their body by their names and positions 2. Leads the learners to define bones and joints of the human body 3. Presents samples of some bones to the class for recognition and drawing, e.g. goat or cow scapular, vertebral column, ribs etc. 4. Draws the human skeleton for learners to copy. 5. Leads learners to	1. Bring samples of bones from their community 2. Participate in class activities and group work 3. Draw samples of bones 4. Draw the entire human skeleton 5. Enumerate the functions of the human skeleton 6. Visit the abattoir to observe mammalian bones and parts of the skeleton.	• Samples of mammalian skeleton. • Charts and card board drawings of human bones and skeleton • The abattoir or meat shop to observe mammalian bones and parts of skeleton	Learners to: 1. draw some bone of the human skeleton 2. list the names of 5 different bones of the human skeleton 3. name two types of joints in the human skeleton 4. draw and label the human skeleton.

THEME: LEARNING ABOUT ENVIRONMENT **LEVEL 2**

STAGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENTS**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
	types and functions of blood vessels 5. describe the human/ mammalian heart 6. discuss the circulatory system in humans.		blood cells and their functions 4. Leads learners to enumerate the types of blood vessels and their functions. 5. Demonstrates the drawing of the human heart, identifying the major blood vessels emanating from the heart Leads learners to discuss the human circulatory system, emphasizing the central role of the heart.	4. Carry out take home assignment on the circulatory system.	circulation.	transported to all parts of the body 5. describe the human heart 6. draw the circulatory system

THEME: HEALTH, SPORTS AND GAMES **LEVEL 2**

STAGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Drugs	Learners should be able to: 1. explain the meaning of drugs 2. list common types of drugs; 3. list ways drugs can be taken into the body;	1. Meaning of Drugs 2. Types of drugs 3. Ways of taking drugs (mouth, inhaling, injecting, rubbing on skin).	1. Explains the meaning of drug; 2. Guides learners to list common types of drugs; 3. Uses charts to explain ways drugs can be taken into the body.	1. Ask and answer questions; 2. Take down notes. 3. Participate in class discussion	• Charts showing various drugs. • Posters, video clips of common drugs and ways of taking them • Samples of common drugs, etc.	Learners to: 1. explain the meaning of drug; 2. list two common types of drugs; 3. write 4 ways drugs can be taken into the body.
2. Types of Drugs	Learners should be able to: 1. identify common of medicines and drugs; 2. differentiate between common (on the counter) drugs and hard (off the counter).	1. Common medicines; 2. On-the counter drugs (e.g. codeine, cigarettes, cola-nuts, etc.) 3. Hard drugs (off the counter).	1. Guide learners to outline different types of drugs. 2. Explain common (on the counter) medicines/ drugs, citing relevant examples. 3. Guides learners to identify hard drugs (off the counter drugs).	1. Outline types of drugs with the guidance of the teacher; 2. Participate in class discussion. 3. Ask and answer questions. 4. Differentiate between: • on-the-counter	• Pictures • Charts showing different types of drugs (hard drugs, and non-hard drugs). • Resource persons.	Learners to: 1. name two types of common drugs (on the counter); 2. identify three types of hard drugs (off the counter); 3. write reports on types of drugs.

THEME: HEALTH, SPORTS AND GAMES **LEVEL 2**

STAGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
			Discuss non-hard drugs such as codeine, cigarettes, cola-nuts, etc.	and off-the-counter drugs hard and non-hard drugs (e.g. codeine, cigarettes, cola-nuts, etc.		
3. Medicine Vigilance	Learners should be able to: 1. explain the meaning of medicine vigilance; 2. discuss procedure in medicine vigilance; 3. identify reasons for medicine vigilance.	1. Meaning of medicine vigilance 2. Procedure and reasons for medicine vigilance.	1. Guide learners to explain the meaning of medicine vigilance; 2. Identify reasons for medicine vigilance; 3. Guide learners to discuss procedures in medicine vigilance.	1. Explain the meaning of medicine vigilance. 2. Identify reasons for medicine vigilance. 3. Discuss procedures in medicine vigilance.	• Pictures • Charts • Slides • Film shows on medicine vigilance and procedure in medicine vigilance.	Learners to: 1. explain the meaning of medicine vigilance; 2. state 3 reasons for medicine vigilance; 3. explain 2 procedures in medicine vigilance.

THEME: YOU AND ENERGY **LEVEL 2**

STATGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
1. Magnets	Learners should be able to: 1. define magnets; 2. recognise different types of magnets; 3. differentiate between permanent and temporary magnets 4. state the properties of magnets; 5. group materials in the environment as magnetic and non-magnetic materials; 6. state common applications of magnetism; 6. make and use magnets.	1. Meaning of magnets 2. Types of magnets • Temporary magnets • Permanent magnets 3. Properties of magnets 4. Uses of magnets 5. Making magnets	1. Collects different types of magnets, e.g. horseshoe, bar magnets, horse-shoe magnets, etc. 2. Plans and organizes simple activities to enable learners discover the properties of magnets. 3. Leads class discussions on the uses of magnets in some household appliances e.g. doorbell, loudspeakers, magnetic stickers, magnetic screw drivers, etc. 4. Guides learners to make temporary magnets.	1. Play with magnets to discover their properties e.g. • attraction or repulsion by magnets • can act through non-magnetic materials, etc. 2. Examine toys and household appliances for magnets. 3. Group materials as magnetic and non-magnetic. 4. Make temporary magnets.	• Bar magnets • Nails, pieces of paper, ropes, pins, threads. • Light bulbs • Connecting wires • Circuit board, • Lamp holders • Switch/key • Iron fillings • Paper clips • Coins • Rubber bands • Solenoid • Cork • Thread • Wool • Wooden blocks • Soft iron • loud speaker	Learners to: 1. identify different types of magnets; 2. explain the differences between temporary and permanent magnets 3. state two properties of a magnet; 4. name three common appliances that use magnets; 5. group materials into magnetic and non-magnetic materials; 6. make temporary magnets.

ACCELERATED BASIC EDUCATION CURRICULUM

THEME: YOU AND ENERGY **LEVEL 2**

STATGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**Teaching and learning RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
2. Magnetism	Learners should be able to: 1. state laws of magnetism; 2. illustrate magnetic poles and fields; 3. draw and label magnetic fields; 4. describe ways of caring for magnets.	1. Laws of magnetism. 2. Magnetic poles and magnetic fields. 3. Care for magnets.	1. Uses simple activities to help learners: • discover and state the laws of magnetism. • identify magnetic poles and fields by using iron filing and magnetic compass. 2. Leads a discussion on how to care for magnets. 3. Write note on the chalkboard for learners to copy.	1. Carry out activities to: • verify the law of magnetism. • identify magnetic poles and fields through activity. 2. Participate in the discussion. 3. Ask and answer questions. 4. Copy notes from the chalkboard into their Basic Science and Technology notebooks.	• Bar magnets. • Cardboard sheets. • Iron filing • Compass • Needles • Pencils • Basic Science and Technology notebooks.	Learners to: 1. state the laws of magnetism; 2. produce magnetic force fields; 3. make sketches of magnetic poles and fields; 4. list two methods of caring for a magnet.

UNDERSTANDING BASIC TECHNOLOGY **LEVEL 2**

STAGE 3						
TOPIC	**PERFORMANCE OBJECTIVES**	**CONTENT**	**ACTIVITIES**		**TEACHING AND LEARNING RESOURCES**	**EVALUATION GUIDE**
			TEACHER	**LEARNERS**		
Word Processing With the Computer	Learners should be able to: 1. identify Word processing Software; 2. mention some of the uses of Word Processing software; 3. identify and use the Title Bar, Menu Bar and Tool Bars; 4. create and edit documents; 5. save and retrieve documents.	1. Word Processing Software: The MSWord 2. Uses of the MSWord 3. The MSWord Environment: • Title Bar • Tool Bars and their uses • Menu bar and its uses 4. Word Processing Skills: e.g. • opening the Microsoft Office, • quitting the software, • creating documents, • editing documents, • saving documents • retrieving documents.	1. Guides learners to explore and identify the: • word processing software in the computer system • Title and Menu Bars and their uses. 2. Shows learners how to: • load and quit the MSWord • use the MSWord to create, edit and save documents • retrieve documents from the computer system • minimize and restore documents.	1. Explore the MSWord environment. 2. Identify and discuss the uses of the Tool and Menu Bars. 3. Practice the following word processing skills: • creating documents, • editing documents, • saving documents • retrieving documents.	1. A functional computer system.	Learners to: 1. identify Word processing Software in a computer system; 2. mention at least three uses of Word Processing software; 3. identify the Title Bar, Menu Bar and Tool Bar in an MSWord environment; 4. use the MSWord to: • create and edit documents; • save and retrieve documents.

ACCELERATED BASIC EDUCATION CURRICULUM (BASIC SCIENCE AND TECHNOLOGY)

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