FEDERAL MINISTRY OF EDUCATION

Accelerated Basic Education Curriculum
Mathematics
(Level1: Stage 1 - 3)

NIGERIAN EDUCATIONAL RESEARCH AND DEVELOPMENT COUNCIL (NERDC)

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ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

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 programme 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

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

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 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 programme 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 JS 1 -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

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

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 Mathematics Curriculum for ABEP is developed to offer the recipients the opportunity to:

1. acquire demonstrable mathematical abilities comparable to their mates in the regular school programme;
2. develop basic constructional and computation skills applicable to their daily living;
3. cultivate the understanding and application of mathematical operations, signs and symbols in everyday life;
4. build a strong foundation in mathematics for future studies;

The thematic approach was adopted in the selection of the contents and learning experiences in the curriculum. These contents are organized under 5 themes at each Level as shown in the table below:

Level	Theme
1	Number and Numeration
	Basic Operation
	Mensuration and Geometry
	Algebraic Process
	Everyday Statistics
2	Number and Numeration
	Basic Operation
	Mensuration and Geometry
	Algebraic Operations
	Everyday Statistics
3	Number and Numeration
	Basic Operation
	Mensuration and Geometry
	Algebraic Operations
	Everyday Statistics

The curriculum has been further scoped and sequenced into lesson topics for ease of implementation at the ABEP learning centres. Since English Studies is a fundamental subject for lifelong learning, 5 hours every week is to be dedicated to the teaching and learning of the curriculum contents. This means that, out of the 4 hours daily learning period for the ABEP, 1 hour shall be used for the teaching and learning of English Studies.

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. Gand
Director, Curriculum Development Centre, NERDC

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THEME 1: NUMBER AND NUMERATION **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
1. Whole numbers 1 -1000	Learners should be able to: 1. identify number of objects from 1-1000; 2. read numbers from 1-1000; 3. write numbers from 1-1000; 4. order numbers from 1-1000 in ascending or descending order; 5. solve problems involving quantitative reasoning on identification, writing and ordering of numbers.	1. Identification of number of objects 1-1000 2. Reading of numbers 1-1000 3. writing of numbers 1-1000 4. Ordering of numbers 1-1000 5. Quantitative reasoning on identification, Writing and ordering of numbers	1. Displays flash cards of different numbers between 1-1000 and ask learners to identify them. 2. Guides learners to read out the numbers they identified from the flash cards. 3. Guides learners to write numbers up to 1000. 4. Asks learners to arrange numbers in order of their magnitude (ascending or descending order). 5. Guides learners to solve simple problems on quantitative reasoning e.g. identify the following numbers in blank spaces: 203, --- 205, --- 207	1. Identify numbers on flash cards. 2. Read numbers on flash cards. 3. Write numbers from 1-1000. 4. Arrange numbers in order of their magnitude. 5. Solve simple problems on quantitative reasoning.	• Flash Cards, • Number Charts, • Number Cards, • Cardboard, • Mathematics Textbooks.	Learners to: 1. write numbers from 1-1000. 2. re-order numbers from 1-1000 in order of magnitude. 3. solve simple quantitative problems such as: count and complete the following: 455----457----459.

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 1: NUMBER AND NUMERATION **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
2. Fractions	Learners should be able to: 1. identify ½ , ¼ and $^3/4$ using concrete objects or shapes; 2. find ½, ¼ and $^3/4$ of any given collection; 3. find $^1/3$, 1/5, $^1/6$, $^2/3$,$^3/5$,$^5/6$ of any given collection.	1. Identification of fractions such as: ½ , ¼ and $^3/4$ using concrete objects and shapes. 2. ½, ¼ and $^3/4$ of any given collection. 3. Fractions (1/3, 1/5, 1/6, 2/3,3/5,5/6) of any given collection.	1. Demonstrates paper folding using paper plates, measure the paper with ruler, then cut off sections from the paper using scissors to show learners ½ , ¼ and $^3/4$. 2. Assigns learners into groups, asks each group to obtain ½ ,¼ and $^3/4$ of any given collection. 3. Asks each group to obtain any two of the following $^1/3$, 1/5, $^1/6$, $^2/3$,$^3/5$,$^5/6$ of any given collection, then allow the group leader to demonstrate how they arrive at their answers.	1. Repeat the paper folding activity as demonstrated by the teacher to obtain ½ , ¼ and $^3/4$. 2. Work in groups to obtain ½ ,¼ and $^3/4$ of any given collection. 3. Learners work in group to obtain $^1/3$, 1/5, $^1/6$, $^2/3$,$^3/5$,$^5/6$ of any given collection and presented by their group leader.	• Paper plates • Analog clock • Fraction strips/ circles • Scissors • Razor Blades • Ruler	Learners to: 1. identify ½ , ¼ and $^3/4$ using concrete shapes, 2. find ½ ,¼ and $^3/4$ of any given collection, 3. find $^1/3$, 1/5, $^1/6$, $^2/3$,$^3/5$,$^5/6$ of any given collection.

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 2: : BASIC OPERATIONS **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
1. Addition	Learners should be able to: 1. add whole numbers with sum up to 1000, 2. add 2-digit numbers without exchanging or renaming, 3. add 2-digit numbers with exchanging or renaming, 4. add 3 numbers taking two at a time, 5. add fractions with the same denominator.	1. Addition of whole numbers with sum up to 1000. 2. Addition of 2-digit numbers without exchanging or renaming. 3. Addition of 2-digit numbers with exchanging or renaming. 4. Addition of 3 numbers taking two at a time. 5. Addition of fractions with the same denominator.	Demonstrates using Abacus how to: 1. add whole numbers up to 1000, 2. add 2-digit numbers without exchanging or renaming, 3. add 2-digit numbers with exchanging or renaming, 4. Add 3-digit numbers taking two at a time. 5. Demonstrates using Fraction box how to add fractions with same denominator.	Practice the use of Abacus to: 1. add whole numbers up to 1000, 2. add 2-digit numbers without exchanging or renaming, 3. add 2-digit numbers with exchanging or renaming, 4. add 3-digit numbers taking two at a time. 5. Add specific fractions with the same denominator using fraction box.	• Abacus, • Fraction Box, • Fingers.	Learners to: 1. add whole numbers with sum up to 1000, 2. add 2-digit numbers without exchanging or renaming, 3. add 2-digit numbers with exchanging or renaming, 4. add 3-digit numbers taking two at a time, 5. add fractions with the same denominator.

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 2: : BASIC OPERATIONS **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
2. Subtraction	Learners Should be able to: 1. subtract from whole numbers not exceeding 999; 2. subtract 2-digit numbers without exchanging or renaming; 3. subtract 2-digit numbers with exchanging or renaming; 4. subtract 3-digit numbers; 5. subtract fractions with the same denominator.	1. Subtraction from whole numbers not exceeding 999. 2. Subtraction of 2-digit numbers without exchanging or renaming. 3. Subtraction of 2-digit numbers with exchanging or renaming. 4. Subtraction of 3-digit numbers. 5. Subtraction of fractions with the same denominator.	Demonstrates using Abacus how to: 1. subtract from whole numbers with answers up to 999, 2. subtract 2-digit numbers without exchanging or renaming e.g. 6 8 -2 5, 3. subtract 2-digit numbers with exchanging or renaming e.g. 4 2 -3 8, 4. subtracts 3-digit numbers taking two at a time. 5. Demonstrates using Fraction box how to subtract fractions with same denominator.	Practice the use of Abacus to: 1. subtract from whole numbers with sum up to 999, 2. subtract 2-digit numbers without exchanging or renaming, 3. subtract 2 – digit numbers with exchanging or renaming, 4. subtract 3-digit numbers taking two at a time. 5. Subtract specific fractions using fraction box	• Abacus, • Fraction Box, • Fingers, • Place-value Charts.	Learners to: 1. subtract from whole numbers with sum up to 999, 2. subtract 2-digit numbers without exchanging or renaming, 3. subtract 2-digit numbers with exchanging or renaming, 4. subtract 3-digit numbers taking two at a time, 5. subtract fractions with the same denominator.

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 2: : BASIC OPERATIONS **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
3. Multiplication	Learners Should be able to: 1. mulitply numbers as repeated addition, 2. multiplication with the use of symbol 'x', 3. mulitply from 1x1 to 20 x 20, 4. mulitply three 1-digit numbers taking two at a time.	1. Mulitplication as repeated addition and the use of symbol 'X'. 2. Mulitplication from 1x1 to 20 x 20. 3. Mulitplication of three 1-digit numbers taking two at a time.	Demonstrates multiplication by using Cuisenaire rods or: 1. Repeated addition e.g. 3+3+3+3 =12, 2. Symbol "X" e.g. 3+3+3+3= 3X4=12. 3. Demonstrates using multiplication table how to multiply 1x1 to 20 x 20. 4. Demonstrates Mulitplication of three-one-digit numbers taking two at a time e.g 6x3x4 = (6x3) x4 = 18x 4 =**72** or 6x(3 x4) = 6x12=**72.**	Practice multiplication using: 1. repeated addition e.g. 6+6+6+6+6 =30, 2. symbol "X" e.g. 6+6+6+6+6 =6X5=30. 3. Practice the use of multiplication table to multiply 1x1 to 20 x 20. 4. Practice Mulitplication of different three 1-digit numbers taking two at a time.	• Multiplication Chats, • Multiplication Table, • Cuisenaire rods.	Learners to: 1. mulitply numbers as repeated addition, 2. multiply numbers using symbol 'x', 3. mulitply from 1x1 to 20 x 20, 4. mulitply different three-one-digit numbers taking two at a time.

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 2: : BASIC OPERATIONS **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
4. Division	Learners Should be able to: 1. divide whole numbers not exceeding 48 (20, 35, 40, 42…..) by one digit number without remainder; 2. identify factors and multiples of whole numbers not exceeding 48; 3. write factors and multiples of given numbers not exceeding 48.	1. Division of whole numbers not exceeding 48 ((20, 35, 40, 42…..) by one digit number without remainder. 2. Factors and multiples of whole numbers not exceeding 48. 3. Writing of factors and multiples of numbers not exceeding 48.	1. Demonstrates division of whole numbers using repeated subtraction e.g 28-4-4-4-4-4-4-4) =0 (Number of times 4 is subtracted is 7). 2. Explains factors of numbers not exceeding 48 using grouping method. 3. Demonstrates Multiples of given numbers by multiplying the number with 1,2,3,4,…….	1. Practice division of whole numbers using repeated subtraction e.g 40÷5 (Number of times 5 is subtracted is ?). 2. Practice grouping method to identify factors of numbers not exceeding 48. 3. Find multiples of 3,4,6….. not exceeding 48.	• Division Chats, • Multiplication Table, • Cuisenaire rods, • Abacus and Counting Frames.	Learners to: 1. divide whole numbers not exceeding 48 by 4, 6, and 12, 2. identify factors of whole numbers not exceeding 48, 3. write factors and multiples of given numbers not exceeding 48.

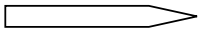
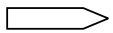
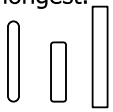
ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 3: MENSURATION AND GEOMETRY **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
1. MONEY	Learners should be able to: 1. recognize Nigerian currencies; 2. shop with Nigerian currencies up to ₦1,000 with different, denominations; 3. calculate the total cost of a given quantity of articles at a given rate.	1. Nigerian Currencies: ₦ 5, ₦ 10, ₦ 20, ₦ 50, ₦ 100, ₦ 200, ₦ 500, ₦ 1,000. 2. Shopping involving addition and subtraction with money up to ₦1,000. 3. Multiplication involving money with product up to ₦ 1,000.	1. Displays different denominations of Nigerian currencies for identification. 2. Displays the price of an article and allow the learners to select currencies to match the price. 3. Guides learners to determine the change to be given when buying an article with a particular denomination. 4. Displays the price of an article for the learners to determine the cost of 2,3,4… articles.	1. Learners name the currency displayed by the teacher. 2. Select the relevant currencies to match the price displayed 3. Determine the change to be given when paying for an article with a particular denomination. 4. Calculate the total cost of articles bought at a given unit price, e.g. 1 book costs N40, what is the cost of 5 books.	• Charts showing Nigerian currencies, • Real currencies charts showing the prices of items, • Real items with the prices displayed.	Learners to solve the following: 1. the price of an article is N350, if you pay with N500 note, what will be your change? 2. the price of one pen is N30, what will be the cost of 7 pens?

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 3: MENSURATION AND GEOMETRY **LEVEL ONE** **STAGE ONE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
2. LENGTH	Learners should be able to: 1. identify lengths and SI unit of measurement; 2. compare the lengths of objects; 3. order the length of items according to their measurements; 4. use hand span, arm, lengths, strides etc to measure lengths of objects; 5. use meter rule to measure lengths of objects; 6. compare actual measurement with the estimated ones. 7. find the perimeter of regular figure in metres and centimetres	1. Ideas of length and SI unit of measurement. 2. Comparison of length of two or more objects to develop the idea of 'longer than' and 'shorter than'. 3. Ordering of lengths of objects. 4. Measuring of lengths and distances using natural units such as hand span, steps, arm lengths, strides, etc. 5. Measurement in metres and centimetres. 6. Measure of lengths, width and comparison of estimates with actual measurement using steps and hand span. 7. Finding the perimeter of regular shapes/figures in metres and centimetres.	1. Guides learners to show the lengths of different objects and use of SI unit of measurement. 2. Guides learners to compare the length of different objects. 3. Guides learners to arrange objects according to their length. 4. Leads learners to use parts of their body to measure lengths e.g. hand span, arm lengths, foot to toe, etc. 5. Guides learners to use meter ruler to measure correctly lengths of objects around. 6. Leads learners to measure the length of object in groups using metre rule and hand span, arm, length etc. then compare each learners result. 7. Measure the perimeter of regular shapes figures.	1. Indicate the length of objects as directed by the teacher. 2. Compare the lengths of different objects using tall, taller, tallest etc. 3. Arrange the lengths of many objects in order of long, loner, longest, vice - verse. 4. Use hand span, arm length etc. to measure length of table, desk, etc. 5. Measure length using metre rule, e.g. table, desks, board, etc. 6. Each member of a group measure a given object (table) using: (i) ruler or meter rule and compare their results (ii) hand span or arm length and compare their results. 7. Measure the perimeter of regular shapes/figures.	• Meter rule, • Ruler, • objects in the classroom, • relevant parts of the body, • Regular figures/ shapes.	Learners to solve the following: 1. which of the two objects is longer (i)  (ii)  2. arrange the following in order of long, longer, longest. (i)  3. use hand span to measure the black board in the class. 4. use ruler to measure the length of desk in the class 5. calculate the perimeter of the table in your classroom.

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 3: MENSURATION AND GEOMETRY **LEVEL ONE** **STAGE TWO**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
3. TIME	Learners should be able to: 1. read the time from the Clock such as 2 o'clock 5 o'clock, half past 3, etc.; 2. name days of the week; 3. read the calendar according to the days of the month, months of the year, date of events.	1. Reading clocks to the hour and half hour. 2. Naming days of the week. 3. Calendar reading.	1. Guides learners to read the time using clocks. 2. Guides learners to order the days of the week as Sunday, Monday, Tuesday… 3. Leads learners to read the calendar according to days, months, and relate days with dates.	Learners to: 1. read the time indicated on the clock by the teacher, 2. name the days of the week in order, 3. identify the number of days in each month, 4. read the date of a particular day in the month.	• Charts of clocks, • Calendar of different types, • Charts showing days of the week.	Learners to solve the following: 1. show the time 3 o'clock on the Clock. 2. What day of the Week is before Friday, before Monday, before Wednesday? 3. How many days are in the month of June, February and January?
4. WEIGHT	Learners should be to: 1. compare the weights of different objects; 2. mention the SI Units of measuring weight e.g. grams, kilograms measure and record their weights and	1. Comparing weights of objects 2. SI units of weight e.g. grams and kilograms 3. Measuring of weights.	Guides learners to: 1. estimate their weights, 2. measure their weights. 3. Compare their weights using Weight balance. 4. order their weight in ascending or descending order	1. Estimate their weights. 2. Measure their weights using weight balance. 3. Compare their weights using weight balance. 4. Order their weights in order of magnitude.	• Weighing balance, • Weighing scale • Objects of different weights .	Learners to: 1. estimates their weights, 2. measure their weights, 3. compare their weights, 4. order their weights in ascending or descending order of magnitude,

ACCELERATED BASIC EDUCATION CURRICULUM (MATHEMATICS)

THEME 3: MENSURATION AND GEOMETRY **LEVEL ONE** **STAGE TWO**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
	that of different objects in ascending order.		of magnitude. 5. identify weights of various magnitudes in gram and kilogram.	5. Identify objects of different magnitudes in gram and kilogram.		5. identify objects of different sizes in gram and kilogram.
5. CAPACITY	Learners should be able to: 1. identify and name objects that could be used for measuring capacity; 2. identify litre as unit of measuring capacity; 3. measure liquid (fluid) with graduated cylinder up to any litre.	1. Identification and names of objects used for measuring capacity. 2. Litre as a unit of measurement 3. Measuring liquid, e.g. water with graduated cylinder up to a litre.	Guides learners to: - 1. identify and name objects that could be used for measuring, capacity 2. identify litre as unit for measuring capacity, 3. measure capacity of various liquid up to a litre.	1. Identify and name objects that could be used for measuring capacity 2. Mention local containers used in measuring capacity 3. Read the capacity indicated on different container like bottle of eva water, coke, Fa ro, etc.	• Bottles, • Buckets, • Calabash, • Mudu • Graduated cylinders, etc.	Learners to solve the following: 1. which of the containers below can be used to measure a sack of Gari a) Bottle b) Mudu c) Calabash d) Bucket 2. What is the unit used in measuring capacity?

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
6. THREE DIMENSIONAL SHAPES	Learners should be able to: 1. Identify Cube, Cuboid, Cylinder and Sphere 2. Differentiate between cube and cuboid 3. State the properties of a cube and cuboid 4. State the properties of a cylinder and a sphere.	1. Types of 3-Dimentional shapes e.g Cube, cuboid, cylinders and sphere 2. Differences between cube and cuboid. 3. Properties of cube and cuboid: faces, corners, edges 4. Properties of a cylinder and sphere: curved surfaces	1. Guides learners to classify objects like cube of sugar, maggi cube, box of matches, ball, tin of milk. 2. Guides learners to compare the differences between cube and cuboid. 3. Put learners in groups and direct them to count the number of faces, corners, edges in cubes, cuboids, cylinders and spheres.	1. Classify the presented objects as directed 2. State the differences between cube and cuboid. 3. Each group to count the number of faces, corners and edges of cube, cuboid and cylinder	• Commercially made objects, packets, cube, cuboid, cylinder and sphere, • Models of cube and cuboid in the classroom, • Charts of cubes, cuboids, cylinders and sphere.	Leaners to answer the following: 1. all the faces of a cuboid are squares True or false? 2. how many edges has a cylinder, sphere and cuboid?

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TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
7. TWO DIMENSIONAL SHAPES	Learners should be able to: 1. identify square, rectangle, circle and triangle; 2. differentiate between square and rectangular shapes; 3. state the properties of square, rectangle, circle, and triangle.	1. Identification of two-dimensional shapes: square, rectangle, circle, triangle. 2. Square corners of two-dimensional shapes: Square and Rectangle. 3. Properties of two-dimensional shapes: square, rectangle, Circle and Triangle.	1. Leads learners to identify two-dimensional shapes using models of square, rectangle, and triangle. 2. Displays any shape and asks learners to label the square corners 3. Groups learners and leads them to count the number of sides, angles, square corners, rectangles, triangles and circle.	1. Identify the squares on the chart. 2. identify the rectangles on the chart provided 3. Show the square corners of the figures in the chart provided 4. Count the number of sides, square corners in a square rectangle, sphere etc.	• Models of a square, rectangle circle and triangle, • charts showing square, rectangles, circles and triangle.	Learners to answer the following: 1. how many sides has a square, triangle, and rectangle? 2. how many angles has a triangle, square and rectangle? 3. state three properties of a square, and rectangle, etc.

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TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION
			TEACHER	LEARNERS		
8. Area	Learners should be able to calculate area of different objects: rectangles, square, triangle, circle and other surfaces;	1. Area of different objects: rectangle, square, triangle, circles and other surfaces.	1. Guides learners to calculate area of different objects: rectangle, square, triangle, circle and other surfaces.	1. Calculate area of different objects: rectangle, square, triangle, circle and other surfaces by: (i). Measure length, breadth, angle and radius using ruler, thread, broom, stick, etc. (ii). Counting number of squares in square, rectangle, etc.	• Different objects: rectangle, square, triangle, circle and other surfaces: • Ruler • Pencil • Tape rule	Learners to calculate area of different objects: rectangles, squares, triangles, circles and other surfaces.
	2. compare objects with respect to their sizes.	2. The idea of larger than, smaller than and equal to.	2. Guides learners to compare objects with respect to their sizes.	2. Compare objects with respect to their sizes. 3. Group objects according to their sizes.	5. Different objects: bucket, water tank, charts of objects.	Learners to compare objects with respect to their sizes.

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THEME 3: MENSURATION AND GEOMETRY **LEVEL ONE** **STAGE THREE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION
			TEACHER	LEARNERS		
9. Symmetry	Learners should be able to: 1. draw line of symmetry of given shape; 2. state number of lines of symmetry of given shapes.	Line of symmetry.	1. Guides learners to draw line of symmetry of given shapes; 2. State number of lines of symmetry in given shapes.	1. Draw line of symmetry in given shapes; 2. State number of lines of symmetry in given shapes.	• Pencil • Ruler • Card board Paper	Learners to: 1. draw line of symmetry. 2. state number of lines of symmetry in given shapes.

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THEME 4: ALGEBRAIC PROCESSES **LEVEL ONE** **STAGE THREE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION
			TEACHER	LEARNERS		
1. Open Sentences	Learners should be able to: 1. solve problems on open sentences. 2. solve problems on open sentences involving addition and subtraction.	1. Open sentences e.g: 50 + ☐ = 70 2. Open sentences involving addition and subtraction e.g. 15 + ☐ = 40 75 - ☐ = 70	Guides learners to: 1. Solve problems on open sentences e.g: 50 + ☐ = 70 2. Solve problem on open sentences involving addition and subtraction e.g. 15 + ☐ = 40 75 - ☐ = 70	1. Solve problems on open sentences e.g: 90 + 110 = ☐ 2. Solve problems on open sentences involving addition and subtraction e.g. 200 + ☐ = 402 1,000 - ☐ = 700	• Flash cards and • Cardboards containing problems on open sentences.	Learners to: 1. solve problems on open sentence; 2. solve problems on open sentences involving addition and subtraction.

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THEME 5: EVERYDAY STATISTICS **LEVEL ONE** **STAGE THREE**

TOPIC	PERFORMANCE OBJECTIVES	CONTENT	ACTIVITIES		TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
			TEACHER	LEARNERS		
1. Data Collection	Learners should be able to: 1. Generate data using their ages and heights; 2. collect data and arrange them in array; 3. collect data and arrange them in groups.	1. Data collection: ages and heights of learners; 2. Collecting data and arranging them in arrays. 3. Collecting data and arranging them in groups.	Guides learners to: 1. state their ages and heights, 2. collect data and arrange them in arrays, 3. collect data and arrange them in groups.	1. State their ages and heights. 2. Collect data and arrange them in arrays. 3. Collect data and arrange them in groups.	• Learners ages and heights, • Population and types of animals in a community. • Number and types of cars, • Population and types of schools, • Population and types of houses.	Learners to: 1. state their ages and heights. 2. collect data and arrange them in arrays. 3. collect and group data.
2. Pictograms	Learners should be able to: 1. interpret pictogram; 2. identify mode from pictogram.	1. Pictogram. 2. Mode identification from pictogram.	Guides learners to: 1. Interpret pictogram 2. Identify mode from pictogram.	1. Interpret pictogram 2. Identify mode from pictogram.	• Chart of pictogram • Chart of pictogram mode.	Learners to: 1. interpret pictogram 2. identify mode from pictogram.

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