



REPUBLIC OF KENYA

**LOWER PRIMARY LEVEL CURRICULUM DESIGNS
GRADE 2**

**MATHEMATICS ACTIVITIES
FOR LEARNERS WITH HEARING IMPAIRMENT**



KENYA INSTITUTE OF CURRICULUM EDUCATION

2024

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FOREWORD

The Government of Kenya is committed to ensuring that policy objectives for Education, Training and Research meet the aspirations of the Constitution of Kenya 2010, the Kenya Vision 2030, National Curriculum Policy 2019, the United Nations Sustainable Development Goals (SDGs) and the Regional and Global conventions to which Kenya is a signatory. Towards achieving the mission of Basic Education, the Ministry of Education (MoE) has successfully and progressively rolled out the implementation of the Competency Based Curriculum (CBC) at Pre-Primary, Primary and Junior School levels.

The implementation of Competency Based Curriculum involves monitoring and evaluation to determine its success. After the five-year implementation cycle, a summative evaluation of the primary education cycle was undertaken to establish the achievement of learning outcomes as envisaged in the Basic Education Curriculum Framework. The Government of Kenya constituted a Presidential working Party on Education Reforms (PWPER) in 2022 to address salient issues affecting the education sector. PWPER made far reaching recommendations for basic education that necessitated curriculum review. The recommendations of the PWPER, monitoring reports, summative evaluation, feedback from curriculum implementers and other stakeholders led to rationalisation and review of the basic education curriculum.

The reviewed Grade one curriculum designs for learners with Hearing Impairments build on competencies attained by learners at Pre-primary level. Emphasis at this grade is the development of basic literacy, numeracy and skills for interaction with the environment.

The curriculum designs present National Goals of Education, essence statements, general and specific expected learning outcomes for the subjects as well as strands and sub strands. The designs also outline suggested learning experiences, key inquiry questions, core competencies, Pertinent and Contemporary Issues (PCIs), values, and assessment rubric.

It is my hope that all Government agencies and other stakeholders in Education will use the designs to plan for effective and efficient implementation of the CBC.

HON. EZEKIEL OMBAKI MACHOGU, CBS
CABINET SECRETARY,
MINISTRY OF EDUCATION

PREFACE

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade one is the first grade of Primary education level while Grade 6 is the final grade of the level in the reformed education structure.

The reviewed Grade two curriculum furthers implementation of the CBC from Pre-Primary level. The curriculum provides opportunities for learners to focus in a field of their choice to form a foundation for further education and training and/or gain employable skills. This is very critical in the realisation of the Vision and Mission of the on-going curriculum reforms as enshrined in the Sessional Paper No. I of 2019 whose title is: Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development in Kenya. The Sessional Paper explains the shift from a content-focused curriculum to a focus on **nurturing every learner's potential**.

Therefore, the Grade two curriculum designs for learners with Hearing Impairments are intended to enhance the learners' development in the CBC core competencies, namely: Communication and Collaboration, Critical Thinking and Problem Solving, Creativity and Imagination, Citizenship, Digital Literacy, learning to Learn and Self-efficacy.

The curriculum designs provide suggestions for interactive and differentiated learning experiences linked to the various sub strands and the other aspects of the CBC. They also offer several suggested learning resources and a variety of assessment techniques. It is expected that the designs will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade one and prepare them for smooth transition to Grade two. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

DR. BELIO KIPSANG', CBS
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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review (SNE adapt) curricula and curriculum support materials for basic and tertiary education and training. The curriculum development process for any level of education involves thorough research, international benchmarking and robust stakeholder engagement. Through a systematic and consultative process, the KICD conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF) 2017, that responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, International Bureau of Education Guidelines and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate successful achievement of the stipulated mandate and implementation of the Government and Sector (Ministry of Education (MoE) plans. The Institute also receives support from development partners targeting specific programmes. The revised Grade one curriculum designs for learners with Hearing Impairments were developed and adapted with the support of the World Bank through the Kenya Primary Education Equity in Learning Programme (KPEELP); a project coordinated by MoE. Therefore, the Institute is very grateful for the support of the Government of Kenya, through the MoE and the development partners for policy, resource and logistical support. Specifically, special thanks to the Cabinet Secretary-MoE and the Principal Secretary – State Department of Basic Education,

I also wish to acknowledge the KICD curriculum developers and other staff, all teachers, educators who took part as panelists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade one curriculum designs for learners with Hearing Impairments. In relation to this, I acknowledge the support of the Chief Executive Officers of the Teachers Service Commission (TSC) and the Kenya National Examinations Council (KNEC) for their support in the process of developing and adapting these designs. Finally, I am very grateful to the KICD Council Chairperson and other members of the Council for very consistent guidance in the process.

I assure all teachers, parents and other stakeholders that this curriculum design will effectively guide the implementation of the CBC at Grade one and preparation of learners with Hearing Impairments for transition to Grade two.

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TABLE OF CONTENTS

FOREWORD.....	iii
PREFACE.....	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS.....	vi
NATIONAL GOALS OF EDUCATION	vii
INTRODUCTION	ix
LEARNING AREAS TIME ALLOCATION	x
LEVEL LEARNING OUTCOMES FOR PRIMARY EDUCATION	xi
ESSENCE STATEMENT	xi
SUBJECT GENERAL LEARNING OUTCOMES.....	xii
STRAND1.0 NUMBERS	1
STRAND2.0 MEASUREMENT	18
STRAND 3.0 GEOMETRY	30
SUGGESTED RESOURCES.....	35

NATIONAL GOALS OF EDUCATION

1. **Foster nationalism, patriotism, and promote national unity.**

Kenya's people belong to different communities, races and religions and should be able to live and interact as one people. Education should enable the learner to acquire a sense of nationhood and patriotism. It should also promote peace and mutual respect for harmonious coexistence.

2. **Promote social, economic, technological and industrial needs for national development**

Education should prepare the learner to play an effective and productive role in the nation.

a) **Social Needs**

Education should instill social and adaptive skills in the learner for effective participation in community and national development.

b) **Economic Needs**

Education should prepare a learner with requisite competences that support a modern and independent growing economy. This should translate into high standards of living for every individual.

c) **Technological and Industrial Needs**

Education should provide the learner with necessary competences for technological and industrial development in tandem with changing global trends.

3. **Promote individual development and self-fulfillment**

Education should provide opportunities for the learner to develop to the fullest potential. This includes development of one's interests, talents and character for positive contribution to the society.

4. Promote sound moral and religious values

Education should promote acquisition of national values as enshrined in the Constitution. It should be geared towards developing a self-disciplined and ethical citizen with sound moral and religious values.

5. Promote social equity and responsibility

Education should promote social equity and responsibility. It should provide inclusive and equitable access to quality and differentiated education; including learners with special educational needs and disabilities. Education should also provide the learner with opportunities for shared responsibility and accountability through service learning.

6. Promote respect for and development of Kenya's rich and varied cultures

Education should instill in the learner appreciation of Kenya's rich and diverse cultural heritage. The learner should value, own and respect other people's culture as well as embrace positive cultural practices in a dynamic society.

7. Promote international consciousness and foster positive attitudes towards other nations

Kenya is part of the interdependent network of diverse peoples and nations. Education should therefore enable the learner to respect, appreciate and participate in the opportunities within the international community. Education should also facilitate the learner to operate within the international community with full knowledge of the obligations, responsibilities, rights and benefits that this membership entails.

8. Good health and environmental protection

Education should inculcate in the learner the value of physical and psychological well-being for self and others. It should promote environmental preservation and conservation, including animal welfare for sustainable development.

INTRODUCTION

The Lower Primary designs are meant for learners in Grade 1 to 3. They have taken cognisance of the various aspects of development of learners of that age cohort. The designs are comprehensive enough to guide the teachers to effectively deliver the curriculum.

The teacher must understand the learning outcomes and be able to use the suggested learning experiences to achieve the outcomes. The teacher can also design their own learning experiences as long as they achieve the designed learning outcomes. A variety of learning experiences will ensure that learners are engaged in the learning experience. Practical experiences will allow learners to retain more in the learning process. The designs allow the teachers to use a variety of assessment methods but in the end they must evaluate the achievement of the learning outcomes.

The curriculum designs are very critical and teachers must make reference to them consistently

The Curriculum Designs for Lower Primary are in four volumes:

Volume One

- Kiswahili Activities
- Literacy
- English Activities

Volume Two

- Mathematics Activities
- Environmental Activities
- Hygiene and Nutrition Activities

Volume Three

- Christian Religious Education
- Hindu Religious Education
- Islamic Religious Education

Volume Four

- Movement and Creative Activities

LEARNING AREAS TIME ALLOCATION

S/ No.	Learning Area	Lesson
1	Mathematical Activities for Learners with Hearing Impairment	5
2	English Language Activities for Learners with Hearing Impairment	5
3	Environmental Activities for Learners with Hearing Impairment	4
4	Creative Activities for Learners with Hearing Impairment	7
5	Religious Education Activities	3
6	Kiswahili language activities for Learners with Hearing Impairment	4
7	Kenyan Sign Language Activities	2
8.	Pastoral/ Religious Instruction Programme	1
	Total	31

LEVEL LEARNING OUTCOMES FOR PRIMARY EDUCATION

By the end of the Primary Education, the learner should be able to:

- a) Communicate appropriately using verbal and or non-verbal modes in a variety of contexts.
- b) Apply acquired knowledge, skills, values and attitudes in everyday life.
- c) Demonstrate social skills, moral and religious values for positive contribution to society.
- d) Exploit one's talents for individual development and self-fulfillment.
- e) Explore, manipulate, manage and conserve the environment for learning and sustainable development.
- f) Use digital literacy skills for learning and enjoyment.
- g) Value Kenya's rich and diverse cultural heritage for harmonious living.
- h) Appreciate the need for, and importance of interdependence of people and nations

ESSENCE STATEMENT

Mathematics is a learning area that involves computation in numbers and arithmetic, shapes, spatial relations and information processing in the form of data. It is a vehicle of development and improvement of a country's economic development. By learning mathematics, learners develop an understanding of numbers, logical thinking skills and problem-solving skills. Mathematics is applied in business, social and political worlds. At this level mathematics will build on the competencies acquired by the learner in the early years of education. Further, this design has been adapted to ensure that learners who are Deaf and those with Hard of Hearing learn effectively. The adaptations include suggestions for provision of sign interpretation on aspects that require use of sound, use of digital devices with assistive technology, use of visual aids such as charts, maps and diagrams, use of hands-on activities, guided demonstrations, purposeful pairing and use of adapted learning resources. The design has also incorporated alternative learning outcomes and activities to enhance the acquisition of sign language vocabulary to learners with Hearing Impairments.

SUBJECT GENERAL LEARNING OUTCOMES

By the end of Primary Education, the learner should be able to:

1. Demonstrate mastery of number concepts by working out problems in day-to-day life.
2. Apply measurement skills to find solutions to problems in a variety of contexts.
3. Apply properties of geometrical shapes and spatial relationships in real life experiences.
4. Apply data handling skills to solve problems in day-to-day life.
5. Analyze information using algebraic expressions in real life situations.
6. Apply mathematical ideas and concepts to other learning areas or subjects and in real life contexts.
7. Develop confidence and interest in mathematics for further learning and enjoyment.
8. Develop values and competencies for a cohesive harmonious living in the society.
9. Manage pertinent and contemporary issues for enhanced inter-personal relationship

STRAND1.0 NUMBERS

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p>1.0 NUMBERS</p>	<p>1.1 Number Concept (8 lessons)</p>	<p>By the end of the sub-strand, the learner should be able to;</p> <p>a) sign words related to number concepts,</p> <p>b) identify numbers 1 to 100 in symbols in different situations,</p> <p>c) represent numbers 1 to 100 using concrete objects from the environment,</p> <p>d) play number games using number cards or digital devices, appreciate the use of numbers in real life situations.</p>	<ul style="list-style-type: none"> ● Learners in groups are guided to identify, fingerspell and sign read numbers 1 to 100 from cards or charts. ● Learners in pairs or groups are guided to watch signed videos, captioned videos, illustrations and charts of objects from their immediate environment then collect safe concrete objects from the environment. ● Learners in groups are guided to fingerspell and sign the concrete objects collected from the environment. ● Learners in groups are guided to match a group of objects to their number value. ● Learners in groups to fingerspell and sign read and write number value of objects. ● In groups, learners discuss, choose and play number games in turns using number cards or digital devices. 	<p>How do we tell our positions in a competition?</p>
<p>Core-Competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: Teamwork is enhanced as learners actively contribute to group decision making in pairs or in groups, discuss. ● Digital literacy: Interacting with digital technology as the learner plays games using digital devices with assistive technology. 				

Values:

- Integrity: Transparency is enhanced as learners in groups run for a distance and each to be assigned the correct position using the words first, second up to Twentieth position depending on when they finish the race.

Pertinent and Contemporary Issues (PCIs):

- Self– awareness: As learners participate in a race.

Link to other learning areas:

- Learner interacts with environmental material for counting relating to the environment and its resources in Environmental activities.

Suggested Learning resources:

- Real objects like marbles, sticks, stones, grains, digital devices.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	1.2 Whole Numbers (20 lessons)	By the end of the sub-strand, the learner should be able to: a) sign words related to counting of numbers forward up to 100, b) count numbers forward up to 100 in different situations, c) count numbers backward from number 50, d) read and write numbers 1 to 100 in symbols in different situations, e) identify the place value of numbers in ones and tens, f) read and write numbers 1 to 20 in words, g) work out missing numbers in number patterns up to 100, h) appreciate number patterns in playing number games.	<ul style="list-style-type: none"> ● Learners in pairs or groups fingerspell and sign numbers forward up to 100 starting from any point. ● Learners in pairs or groups to sign numbers backward from 50 starting from any point. ● Learners in pairs or groups are guided to practice through play using number cards counting numbers forward up to 100. ● Learners in groups discuss the place value of digits written on number cards on the chalkboard. ● Sign read and write numbers 1 to 20 in words. ● Work out missing numbers in number patterns up to 100. ● Post them on the wall or be attached to their individual portfolios. ● Improvise place value tins and pockets from locally available materials. ● Learners are guided to play games involving whole numbers up to 100 using digital devices and other resources. ● 	How do we get the next number in a number pattern?

Core-Competence to be developed:

- Learning to learn: Independent learning is enhanced as learners work on their own in assigned tasks of counting numbers to 100.

Values:

- Respect: Learners understand and appreciate others' ideas and value the input of their peers as they work in pairs taking turns to read and write numbers 1-100 in words using number cards.

Pertinent and Contemporary Issues (PCIs):

- Health promotion: Learners in pairs or in groups take care of each other as they count forward in 1's, 10's, and 100's starting from any point up to 1000 using rope skipping game.

Link to other learning areas:

- Learners relate skills for rhyme singing in counting to Creative activities.

Suggested Learning resources:

- A number line drawn on the ground/floor, place value chart, a rope, number cards

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0NUMBERS	1.3 Addition (25 lessons)	<p>By the end of the sub-strand, the learner should be able to:</p> <p>a) sign a 1 digit and a 2-digit number and terms related to addition and place values,</p> <p>b) add a 2- digit number to up to a 1 -digit number without regrouping with sum not exceeding 100,</p> <p>c) add a 2- digit number to a 2- digit number with and without regrouping with sum not exceeding 100,</p> <p>d) add two multiples of 10 whose sum does not exceed 100,</p> <p>e) work out missing numbers in patterns involving addition of whole numbers up to 100,</p> <p>f) appreciate the addition of numbers in real life situations while using digital devices or other resources.</p>	<ul style="list-style-type: none"> ● Learners in pairs or groups are guided to identify fingerspell and sign a 2-digit number and a 3-digit number and terms such as place value, place value pocket value and charts. ● In pairs, write additional sentences given in horizontal form into vertical form according to place value. ● Add a 2-digit number to a 1-digit number without regrouping. ● Add a 2-digit number to a 1-digit number with regrouping. ● In pairs or groups, discuss and come up with different ways of adding two 2-digit numbers without and with regrouping. ● In pairs or groups, add 2 multiples of ten whose sum does not exceed 100. ● Play games involving addition using digital devices or other resources. ● In groups, make patterns using numbers up to 100 and share with other groups. 	<ol style="list-style-type: none"> 1) How do you arrange numbers when adding vertically 2) How do you identify the first two numbers to add when adding three single digit numbers? 3) How can you get the next number in a given pattern?

			<ul style="list-style-type: none"> Learners in pairs /groups are guided to use digital devices or other resources for activities involving additions. 	
<p>Core Competencies to be developed:</p> <p>Imagination and creativity: Learners develop the skill of making connections as they create and work out missing numbers in patterns involving addition up to 1000.</p>				
<p>Values:</p> <p>Respect: accommodate each other as they work in groups to make number patterns and share with other groups.</p>				
<p>Pertinent and Contemporary Issues (PCIs):</p> <p>Social cohesion as learners works in groups to practice adding 2 multiples of ten with sum not exceeding 100.</p>				
<p>Link to other learning areas:</p> <p>Learner relates pattern making skill using numbers shading and drawing in Creative activities.</p>				
<p>Suggested Learning resources:</p> <p>Basic addition facts table, place value chart, abacus, tins.</p>				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question
1.0 NUMBERS	1.4 Subtraction (20 lessons)	<p>By the end of the sub-strand, the learner should be able to.</p> <ul style="list-style-type: none"> a) sign subtraction and terms related to subtraction, b) subtract a 1-digit number from a 2-digit number without regrouping, c) subtract a 2-digit number from a 2-digit number without and with regrouping, d) subtract a lower multiple of 10 from a higher multiple of 10, e) work out missing numbers in patterns involving subtraction up to 100, f) appreciate subtraction of numbers in real life situations 	<ul style="list-style-type: none"> ● Learner in groups/pairs to be guided to identify, fingerspell and sign subtraction and the operation sign (-) ● Learners in groups are guided to use place value pockets and charts to aid them in placing digits in their correct place values during subtraction. ● Learners in groups/pairs are guided to subtract a 2-digit number from a 2-digit number without regrouping using place value apparatus. ● Learners in turns are guided to subtract a 2-digit number from a 2-digit number with regrouping using place value apparatus. ● Learners in groups are guided to subtract lower multiples of 10 from higher multiples of 10. ● Learners in groups are guided discuss how to work out missing numbers in patterns involving subtraction up to 100. 	<p>How do you identify the missing number in a number pattern involving subtraction?</p>
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> ● Digital literacy: Learners interact with digital technology with assistive technology as they play games involving subtraction using digital devices and other resources. 				

Values

- **Unity:** cooperation working in their respective groups subtracting of up to 2- digit numbers without regrouping using place value pockets and share findings with others.

Pertinent and Contemporary Issues (PCIs):

- Social cohesion kindness and friendliness when work in pairs or groups to subtract multiples of 10.

Link to other learning areas:

- Learner relates skills of subtraction of numbers to consumer education in Environmental activities.

Suggested Learning resources:

- Bottle tops, marbles, stones, grains, number line drawn on the ground/floor, multiplication tables, abacus.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	1.5 Multiplication (10 lessons)	By the end of the sub-strand, the learner should be able to: a) sign multiplication and terms related to multiplication, b) represent multiplication as repeated addition using numbers 1, 2, 3, by 2 and 3, c) write repeated addition sentences as multiplication using '×' sign, d) multiply 1-digit numbers by 1, 2, 3, 4 and 5, e) multiply 1-digit numbers by 10, f) appreciate arranging objects in groups of 3's, 4's, 5's and 10's in real life situations.	<ul style="list-style-type: none"> ● Learner in groups/ pairs are guided to identify, fingerspell and sign multiplication and terms related to multiplication such as multiplication charts/ tables. ● in pairs or groups, use counters or other concrete objects to represent multiplication as repeated addition. ● in pairs, model multiplication as repeated addition using concrete objects. ● use '×' sign in writing repeated addition sentences as multiplication. ● in groups, multiply 1-digit numbers by 1, 2, 3, 4, 5. ● use locally available materials to model a multiplication chart and display in the learning environment. ● in groups, multiply 1-digit numbers by 10 to form multiples of 10. 	<ol style="list-style-type: none"> 1) How can you work out multiplication using repeated addition? 2) How do model multiplication as repeated addition?

			<ul style="list-style-type: none"> ● play games involving multiplication using digital devices or other resources. ● visit the local market to see how different fruits and other items are arranged in groups of 3's, 4's, 5's or 10's for selling. ● Learners to be guided to watch signed videos/captions and play digital games involving multiplication. 	
Core competencies to be developed:				
<ul style="list-style-type: none"> ● Learning to learn: Learners develop self- discipline as they work collaboratively in pairs or groups to model multiplication as repeated addition of numbers 1, 2, 3, 4 and 5 by 4 and 5 using counters. ● Digital literacy: Interacting with digital technology as the learner plays adapted digital games involving multiplication 				
Values				
<ul style="list-style-type: none"> ● Unity: Cooperation in sharing resources amicably as they model multiplication as repeated addition. 				
Pertinent and Contemporary Issues (PCIs):				
<ul style="list-style-type: none"> ● Financial literacy as learners visits the local market to see how different fruits and other items are arranged in groups of 3's, 4's, 5's or 10's for selling. 				
Link to other learning areas:				
<ul style="list-style-type: none"> ● Learner relates multiplication skills to consumer education in Environmental activities. 				
Suggested Learning resources:				
<ul style="list-style-type: none"> ● Bottle tops, marbles, stones, sticks, grains, multiplication tables 				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	1.6 Division (8 lessons)	<p>By the end of the sub-strand, the learner should be able to:</p> <ul style="list-style-type: none"> a) sign division and terms related to division, b) represent division as equal sharing up to number 20 by 2, c) represent division as equal grouping of numbers up to 25 by 3, d) use ' \div ' sign in writing division sentences, e) divide numbers up to 25 by 4 and 5 without a remainder, f) appreciate the application of division of numbers in real life situation. 	<ul style="list-style-type: none"> ● Learner in groups/ pairs are guided to identify, fingerspell and sign division and terms related to division such as take away, remainder. ● in groups, share a given number of objects equally by each picking one object at a time until all the objects are finished. Each learner to count how many objects he/she got. ● as a class, place several objects together, let each group pick one item at a time until there is no object remaining, each group to count the number of objects they picked. ● write division sentences using the sign '\div'. ● Organise numbers up to 25 into groups of 4 or 5 without a remainder. ● play games involving division using digital devices or other resources. 	<ol style="list-style-type: none"> 1. How can you represent division as repeated subtraction? 2. How can we use the multiplication table to work out division questions?
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: Learners develop teamwork as they contribute to group discussion and actively participating in modeling division as repeated subtraction of numbers up to 50 by 4 and 5 using counters and share their findings with others. 				

Values:

- Social justice: Freedom working freely with each other regardless of their background as they share a given number of objects equally.

Pertinent and Contemporary Issues (PCIs):

- Social cohesion accommodating each other regardless of their background as they share a given number of objects equally.

Link to other learning areas:

- Learners relate skills in division to sharing in religious education activities.

Suggested Learning resources:

- Basic addition facts table, place value chart, multiplication table.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	1.7 Fractions (10 lessons)	By the end of the sub-strand the learner should be able to: a) sign different types of fractions and terms related to fractions, b) identify a $\frac{1}{2}$ as part of a whole in different situations, c) identify a $\frac{1}{4}$ as part of a whole in different situations, d) use fractions in day-to-day activities, appreciate the application of fractions in daily life activities.	<ul style="list-style-type: none"> • Learners in pairs or groups to be guided to identify, fingerspell and sign fractions, proper fraction, improper fraction, mixed fraction, numerator and denominator. • In pairs, use papers, pencils and a pair of scissors to make circular paper cut-outs while observing safety. • In pairs, fold the circular paper cut-outs into two equal parts and identify one of the parts as a half of the whole written as $\frac{1}{2}$. • In pairs, make rectangular paper cut-outs and fold them into two equal parts to get a half of a whole written as $\frac{1}{2}$. • In pairs, fold circular paper cut-outs to get 4 equal parts and identify one of the parts as a $\frac{1}{4}$ of a whole. • In pairs, practice making halves and quarters of a whole. • Play games involving fractions using digital devices or other resources. 	How can you represent a half, a quarter or an eighth of a group?

Core-Competencies to be developed:

- Critical thinking and problem solving: Communication skill is developed as learners discuss in pairs or in groups how to divide a number of objects into 8 equal groups and identify each of the small groups as eighth of a whole.

Values:

- Unity: The spirit of cooperation is enhanced as learners work as a team to make rectangular cut-outs and fold them into 4 equal parts to get a quarter of a whole.

Pertinent and Contemporary Issues (PCIs):

- Safety: Learners in pairs or in groups to safely make circular cut-outs from manila papers.

Link to other learning areas:

- Learners are guided to make rectangular cut-outs and fold to get 8 equal parts and identify one part as $\frac{1}{8}$ of the whole.

Suggested Learning resources:

- Circular and rectangular cut outs, marbles, bottle tops, sticks, grains, stones, manilla papers

Assessment Rubrics

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign terms related to numbers	Sign all terms related to numbers (number concepts, whole numbers, addition, subtraction, division, multiplication and fraction) used in a given context clearly and concisely.	Sign terms related to measurements with good accuracy but may require prompts for less common terms	sign terms related to numbers, but may make errors or struggle with less common terms	sign terms related to numbers confusing most of the terms prompting the learner to fingerspell the terms
Ability to identify positions of numbers 1-20.	Identify positions of numbers 1-100 in both ascending and descending sequences and write the position of the numbers 1st, 2nd, 3rd up to 20th.	Identify positions of numbers 1-100 in both ascending and descending sequences and write the position of most numbers 1st, 2nd, 3rd up to 20th.	Identify positions of numbers 1-20 but with notable errors in both ascending and descending sequences and write the position of the numbers 1st, 2nd, 3rd up to 20th.	Identify positions of numbers 1-20 but with limited ability to order numbers in both ascending and descending sequences and make significant errors in writing the position of the numbers 1st, 2nd, 3rd up to 20th.
Ability to count numbers up to 1000	Count numbers up to 1000 maintaining consistency throughout the counting sequence and understands and applies place value concepts while counting up to 1000.	count numbers up to 1000 maintaining consistency in most parts of the counting sequence and shows good understanding of place value concepts while counting up to 1000.	Count numbers up to 1000 but with inconsistencies in counting sequence and portrays some understanding of place value concepts while counting up to 1000.	Count numbers up to 1000 but with limited ability to count the numbers frequently skipping or repeating and lacks place value concepts.
Ability to add up to 3-digit numbers	add up to 3-digit numbers without and	add up to 3-digit numbers without and with regrouping	add up to 3-digit numbers without and with regrouping	add up to 3-digit numbers without and

without and with regrouping with a sum not exceeding 1000.	with regrouping with a sum not exceeding 1000 by demonstrating clear understanding of regrouping and solving the problems effectively	with a sum not exceeding 1000 by demonstrating understanding of regrouping and solving the problems effectively.	with a sum not exceeding 1000 by demonstrating some understanding of regrouping and add the problems omitting some key aspects in addition.	with regrouping with a sum not exceeding 1000 in a somewhat disorganised manner that lacks clarity.
Ability to subtract up to 3-digit numbers from a 3-digit number without and with regrouping.	Subtract up to 3-digit numbers from a 3-digit number without and with regrouping by demonstrating clear understanding of regrouping and subtracting the problems effectively	Subtract up to 3-digit numbers from a 3-digit number without and with regrouping by demonstrating understanding of regrouping and subtracting the problems effectively.	Subtract up to 3-digit numbers from a 3-digit number without and with regrouping by demonstrating some understanding of regrouping and subtract the problems omitting some key aspects in subtraction.	Subtract up to 3-digit numbers from a 3-digit number without and with regrouping in a somewhat disorganised manner that lacks clarity.
Ability to multiply a single digit number by a single digit number.	Multiplies single digit number by single digit number insightfully and with critical analysis of the products and the patterns generated.	Multiplies single digit number by single digit number, highlighting the products of each multiplication.	Multiplies single digit number by single digit number with little analysis of the products of multiplication.	Multiplies single digit number by single digit number without analysing the patterns and lacks clarity in organisation.
Ability to divide 2-digit numbers by a single digit number without a remainder.	Divide 2-digit numbers by a single digit number without a remainder and efficiently demonstrates a clear understanding of the concept with clarity.	Divide 2-digit numbers by a single digit number without a remainder with neatly and clearly organised steps making it easy to follow the division and demonstrates a clear understanding of the concept.	Divide 2-digit numbers by a single digit number without a remainder but omits some key aspects in performing division.	Divide 2-digit numbers by a single digit number without a remainder in a somewhat disorganised manner that lacks clarity.

<p>Ability to identify $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ as part of a whole or group</p>	<p>Identifies $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ as part of a whole or group with a comprehensive elaboration and demonstrates how it is obtained from the whole with clarity.</p>	<p>Identifies $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ as part of a whole or group mentioning how it is obtained from the whole.</p>	<p>Identifies $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ as part of a whole or group with little information on how it is obtained from the whole.</p>	<p>Identifies $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ as part of a whole or group without explaining how it is obtained from the whole.</p>
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STRAND2.0 MEASUREMENT

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
2.0 Measurement	2.1 Length (6 lessons)	By the end of the sub-strand, the learner should be able to: a) sign length and terms related to length, b) measure length using fixed units, c) identify the metre as a unit of measuring length, d) measure length in metres, e) appreciate measuring length using fixed units in real life situations.	<ul style="list-style-type: none"> ● Learners in pairs/group are guided to identify, fingerspell, read by signing and write length and terms related to length such as meters, distance, measure, estimate. ● In pairs or groups, use sticks of equal length to measure lengths of different objects and record the measurements. ● In pairs or groups, use sticks of different lengths to measure length, including a 1- metre sticks. ● Use locally available materials to make 1-metre sticks and use them to measure the length of various objects within the classroom and record the measurements. ● Measure the length of different objects at home, record the measurements and discuss with peers in school. ● Learners in pairs are guided to watch and take videos of others measuring length then play back and discuss their results using digital devices. 	<ol style="list-style-type: none"> 1. How do you measure the chalkboard using a metre stick? 2. How do you get the total length in metres of the 4 classroom walls? 3. How do you measure the distance between the flag post and the staffroom using a 5 metres long string?

Core Competencies to be developed: <ul style="list-style-type: none">• Digital literacy: Interacting with digital technology playing games involving length measurement using digital devices,
Values: <ul style="list-style-type: none">• Integrity: Learners develop consistency as they engage in measuring the length of the chalkboard and the teacher’s table in metres.
Pertinent and Contemporary Issues (PCIs): <ul style="list-style-type: none">• Environmental awareness: Learners in groups measure the lengths of the 4 walls in their classroom and add the lengths.
Link to other learning areas: Learners relates measuring skills.
Suggested Learning resources: <ul style="list-style-type: none">• Books, pencils, rulers, sticks, bottles, metre rule, metre sticks, digital devices, strings

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question
2.0 Measurement	2.2 Mass (6 lessons)	By the end of the sub-strand, the learner should be able to: a) sign mass and terms related to mass, b) measure mass using fixed units, c) identify the kilogram as a unit of measuring mass, d) measure mass of different objects in kilograms, e) appreciate measuring mass using fixed units in real life situations.	<ul style="list-style-type: none"> ● Learners in pairs or groups are guided to identify fingerspell, read and write terms related to mass, such as kilograms, beam balance, weighing scale. ● In pairs or groups, collect safe materials from the environment for measuring mass. ● In pairs or groups use locally available materials to improvise a beam balance. ● In pairs or groups, use items of the same mass and an improvised beam balance to measure different masses, record and discuss the results. ● In pairs or groups, use an item equivalent to a 1-kilogram mass and a beam balance to measure mass of different objects in kilogram accurately. ● Visit a shop or market and assist vendors measure items such as beans, maize, rice, flour using fixed units, for example an empty 1-kilogram container. 	How can you make a 1kg mass using a beam balance?

			<ul style="list-style-type: none"> ● Measure the mass of different items in kilograms using a 1-kilogram container. ● In pairs or groups learners are guided to play digital games involving mass. 	
Core competencies to be developed:				
<ul style="list-style-type: none"> ● Communication and collaboration: Signing and observing in groups, use items of the same mass and an improvised beam balance to measure different masses, record and discuss the results, 				
Values:				
<ul style="list-style-type: none"> ● Integrity: honesty in measuring mass of different objects and sharing own findings with others. 				
Pertinent and Contemporary Issues (PCIs):				
<ul style="list-style-type: none"> ● Safety of self and others to avoid accidents as they collect materials to be used to measure mass in their immediate environment. 				
Link to other learning areas:				
<ul style="list-style-type: none"> ● Learner relates measuring skills to consumer education in Environmental activities. 				
Suggested Learning resources:				
<ul style="list-style-type: none"> ● Masses of 1kg, soil, sand, beam balance 				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Measurement	2.3 Capacity (8 lessons)	<p>By the end of the sub-strand, the learner should be able to:</p> <ol style="list-style-type: none"> sign capacity and terms related to capacity, measure capacity using fixed units. identify the litre as a unit of measuring capacity. measure capacity in litres. appreciate measuring capacity in litres using improvised containers in real life situations. 	<ul style="list-style-type: none"> Learners in groups/pairs are guided to identify, fingerspell, sign read and write capacity and terms related to capacity such as litres. Learners in pairs /groups are guided to collect safe materials in their immediate environment to be used to measure capacity. Learners in groups are guided through demonstration/ illustration on measuring capacity. Learners in pairs or groups are guided to discuss and measure capacity of different containers using 1 litre containers. Learners in turns are guided to practice addition of capacity in litres in real life situations, example using a 1litre container to fill a 10 litres container. Learners in turns are guided to practice subtraction of 	How can we measure capacity of a 20litres jerrycan?

			<p>capacity in litres in real life situations.</p> <ul style="list-style-type: none"> ● In pairs learners are guided to estimate capacity using 1 litres bottle. ● In groups learners to be guided to watch recorded signed videos/captions, demonstrations and play digital games involving capacity in real life situations. 	
Core Competencies to be developed:				
<ul style="list-style-type: none"> ● Creativity and Imagination: identify the resources within the school environment for use in estimating capacity using 1 Litre containers 				
Values:				
<ul style="list-style-type: none"> ● Peace: Caring for peers and in turns practise addition of capacity in litres in real life situations. 				
Pertinent and Contemporary Issues (PCIs):				
<ul style="list-style-type: none"> ● Environmental Education and Climate change: Keeping surroundings clean and neat as the learner navigates their environment as they collect safe materials for measuring capacity. 				
Link to other learning areas:				
<ul style="list-style-type: none"> ● Learner relates skills in measuring to consumer education in Environmental activities. 				
Suggested Learning resources:				
<ul style="list-style-type: none"> ● Containers of different sizes, 1 litre containers, sand, soil, water, 5 litre containers, digital devices 				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Measurement	2.4 Time (10 lessons)	By the end of the sub-strand, the learner should be able to: - a) sign time and terms related to time, b) relate the months of the year to special occasions, c) recite the number of days in each month of the year, d) read the calendar in terms of day and date, e) measure time using arbitrary units. f) identify the minute and hour hand in clock face, g) read time by the hour from the clock face, h) write time by the hour shown by an analogue and digital clock, i) appreciate keeping time in day-to-day activities.	<ul style="list-style-type: none"> ● Learners in pairs /groups are guided to identify, fingerspell and sign time and terms related to time, i.e. clock, digital and analog clock, minute, ‘past’, ‘to’. ● In pairs or groups, discuss special occasions that take place in different months of the year. ● In pairs or groups, sign sing songs and rhymes related to the number of days in the months of the year. ● In pairs or groups, discuss how to read, tell and write dates from the calendar. ● In pairs or groups, discuss and relate time by hour using the length of a shadow of an object such as a tree in the environment. ● Discuss places where clocks are displayed and how they look. ● Observe a clock face and discuss the minute and hour hand. 	How do we read and tell time using digital and analogue clock?

			<ul style="list-style-type: none"> ● Discuss how to read, tell and write time by the hour using both the analogue and digital clock. ● Discuss the importance of keeping time in different activities. 	
Core Competencies to be developed:				
<ul style="list-style-type: none"> ● Communication and collaboration: Signing and observing clearly and effectively as they discuss in pairs or in groups how to tell time on the clock face using “past” and “to” the hour. 				
Values:				
<ul style="list-style-type: none"> ● Respect: patiently wait for their turn to read and tell time on a digital clock. 				
Pertinent and Contemporary Issues (PCIs):				
<ul style="list-style-type: none"> ● Governance: Law and order in school in keeping time as learners in turns read and tell time on a digital clock. 				
Link to other learning areas:				
<ul style="list-style-type: none"> ● Learners relate time skills to positions and direction in Environmental education and activities. 				
Suggested Learning resources:				
<ul style="list-style-type: none"> ● Clock face both analogue and digital, tactile clock face, manilla paper 				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Measurement	2.5 Money (10 lessons)	<p>By the end of the sub-strand, the learner should be able to:</p> <ol style="list-style-type: none"> sign terms related to Kenyan currency. identify Kenyan currency coins and notes up to sh.100, count the number of sh. 10 and sh. 20 coins in different situations, count the number of sh. 50 and sh. 100 notes in different situations, add two denominations of money with a sum not exceeding sh. 100, use money to buy up to 3 items without balance, appreciate the use of money in buying items. 	<ul style="list-style-type: none"> Learners in pairs or groups are guided to identify, fingerspell, sign and sort out Kenyan currency notes according to their value up to sh.1000 i.e. sh. 5 coin, sh 10 coin, sh 20 coin, sh 50 note, sh 100 note and balance. In pairs or groups, recognize and sort out Kenyan currency coins and notes up to sh.100. In groups, make sh. 10 and sh. 20 coins paper cut-outs, sort and count the number of sh. 10 and sh. 20 coins paper cut-outs. In groups, make sh. 50 and sh. 100 notes paper cut-outs, sort and count the number of sh. 50 and sh. 100 notes paper cut-outs. Add two denominations of money with a sum not exceeding sh. 100. In pairs or groups, role play buying up to 3 items without balance from the model shop in the classroom. Record a video during a role play of classroom shopping activities. 	<p>How do you represent same amount of money using different denominations?</p>

<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Citizenship: Information and communication skills communicates and collaborates with their peers, in pairs or in groups counting Kenyan currency notes in different denominations up to sh100 using imitation money.
<p>Values:</p> <ul style="list-style-type: none"> • Patriotism: Learners dedicate while working in pairs or groups sort out Kenyan currency notes according to their value up to sh.1000.
<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> • Financial literacy: The choice of what to buy and what not to buy as learners in groups role play buying up to 3 items involving balance using imitation money up to sh.1000 in shopping activities.
<p>Link to other learning areas:</p> <ul style="list-style-type: none"> • Learners relate skills on buying and shopping activities in Language activities.
<p>Suggested Learning resources:</p> <ul style="list-style-type: none"> • Kenyan currency coins and notes or imitations up to sh.1000, classroom shop, digital devices

Assessment Rubrics

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign terms related to measurements	Sign all terms related to measurements (length, mass, time, money, capacity) used in a given context clearly and concisely.	Sign terms related to measurements with good accuracy but may require prompts for less common terms	sign terms related to measurements, but may make errors or struggle with less common terms	sign terms related to measurement confusing most of the terms prompting the learner to fingerspell the terms
Ability to measure length using fixed units	Measures length in metres using 1 metre sticks and counting the number of times precisely with specific illustrations and records the results.	Measures length in metres using fixed units highlighting all the steps to be followed.	Measures length in metres using fixed units mentioning some steps to be followed leaving out key aspects of measurement.	Measures length in metres using fixed units providing minimal information on the steps to be followed.
Ability to measure capacity in litres using fixed units.	Measures capacity in litres using fixed units insightfully and shows critical analysis of the relationship between the capacity of different containers.	Measures capacity in litres using fixed units highlighting the different liquids and their capacity in litres.	Measures capacity in litres using fixed units but leaves out key aspects in measuring capacity.	Measures capacity in litres using fixed units but demonstrates limited or no understanding of capacity in litres.
Measuring time using arbitrary units.	Measure time using arbitrary units and relate hours and minutes with an in - depth explanation on the relationships.	Measure time using arbitrary units and minutes and explains their relationships.	Measure time using arbitrary units with little information on their relationships.	Measure time using arbitrary units without explanations on their relationships.
Ability to use money in buying up to 3 items involving balance.	Uses money in buying up to 3 items involving balance, by selecting appropriately up to 3 items and calculates the	Uses money in buying up to 3 items involving balance, with accuracy in selecting up to 3 items and calculates	Uses money in buying up to 3 items involving balance, but with some accuracy in selecting up to 3 items and calculates the	Uses money in buying up to 3 items involving balance, with many challenges in selecting

	total cost of the selected items with clarity.	the total cost of the selected items.	total cost of the selected items with minimal errors.	items within the budget.
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STRAND 3.0 GEOMETRY

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Geometry	3.1 Lines (5 lessons)	By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> sign position, direction and related terms, model straight lines in different ways, draw straight lines in different ways, model curved lines in different ways, draw curved lines in different situations, appreciate the use of lines in real life situations 	<ul style="list-style-type: none"> Learners in pairs or groups are guided to identify, fingerspell and sign position, direction, right, left, turn. In pairs /groups, safely model straight lines using sticks, plasticine or clay or papier Mache and strings. In pairs /groups, safely model curved lines using plasticine or clay or papier Mache and strings. Individually model straight and curved lines by holding their hands in different ways; upward, horizontal, diagonal. Draw straight and curved lines on manila papers and books using pencils, crayons and rulers or sticks. Use digital devices or other resources to draw lines. 	How do cross the road when you get to a road junction?
Core Competencies to be developed: <ul style="list-style-type: none"> Learning to Learn: Develop relationships in groups recreate moving along a straight line from a given point outside the classroom and turning left or right. 				
Values: <ul style="list-style-type: none"> Respect: open mindedness as learners listens and accommodate others' opinions during modeling of straight and curved lines. 				
Pertinent and Contemporary Issues (PCIs):				

- Environmental awareness: Learners use their body parts in movement in moving along a straight line from a given point outside the classroom.

Link to other learning areas:

- Learners relate skills in line formation to drawing in Creative art activities.

Suggested Learning resources:

- Charts showing a straight line, a turn to the left and a turn to the right

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
3.0 Geometry	3.2 Shapes (4 lessons)	By the end of the sub-strand, the learner should be able to: - a) sign shape and terms related to shape, b) identify different shapes in the environment, c) draw shapes in different ways, d) draw patterns involving different shapes, appreciate the use of shapes in forming patterns in fabrics.	<ul style="list-style-type: none"> ● Learners in pairs or groups are guided to identify, fingerspell and sign shape and terms related to shapes. ● Learners in pairs or groups are guided to name different shapes in the environment (triangles, squares, circles and ovals). ● In pairs or groups, learners discuss types of lines in different shapes (triangles, squares, circles and ovals). ● In turns, learners name different shapes of objects or on surfaces in their classroom. ● Draw triangles, squares, circles and ovals on manila papers and display in the learning environment. ● In groups, learners make patterns using triangles, squares, circles and ovals, colour them and share with other groups. ● Play games involving pattern making using digital devices or other resources. 	How many shapes can you identify in your school?
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> ● Creativity and imagination: Imagination and originality as learners in pairs or groups draw or model combined figures found in the environment using up to 2 different shapes for example a hut. ● Digital literacy: Using digital devices as learners use digital devices with assistive technology to play digital games 				
Values:				

Unity: Cooperation sharing available resources in groups or in pairs, for modelling combined figures of up to 2 shapes using safe locally available materials.

Link to PCIs:

- Environmental awareness: learners identify and name the different shapes from the cutouts and relate to shapes found in the environment.

Link to other learning areas:

- Learners relate skills on combined figures and shapes to drawing and shading in Creative arts.

Suggested Learning resources:

- Cut- outs of rectangles, circles, triangles, ovals and squares of different sizes, tactile diagrams showing shapes, tactile cut-outs

Assessment Rubric

LEVEL INDICATOR	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign the terms related to geometry.	sign the terms related to lines and shapes with appropriate facial expressions and body language.	sign the terms related to line and shapes.	signs terms related to lines and shapes with limited facial expression and body language	sign term related to lines and shapes with noticeable struggles.
Ability to draw straight and curved lines in different situations	Draws straight and curved lines in different situations consistently applying the concepts of straight and curved lines in various situations.	Draws straight and curved lines in different situations by applying the concepts of straight and curved lines in various situations	Draws straight and curved lines in different situations applies the concepts of straight and curved lines in various situations with noticeable errors.	straight and curved lines in various situations but lacks the ability to apply it in different situations.
Ability to identify shapes from a figure made of different shapes.	Identify shapes from a figure made of different shapes with comprehensive analysis of the shapes with clarity and generate more complex shapes.	Identify shapes from a figure made of different shapes by showing a clear understanding of the shapes.	Identify shapes from a figure made of different shapes with limited understanding of the shapes.	Identify shapes from a figure made of different shapes without any explanations of the shapes.

SUGGESTED RESOURCES

SUB -STRANDS	RESOURCES
NUMBER CONCEPT	Marbles, sticks, stones, grains
WHOLE NUMBERS	A number line drawn on the ground/floor, place value chart
FRACTIONS	Circular and rectangular cut outs, marbles, bottle tops, sticks, grains, stones
ADDITION	Place value chart, abacus, basic addition facts table
SUBTRACTION	Basic addition facts table, place value chart
MULTIPLICATION	Bottle tops, marbles, stones, grains, number line drawn on the ground/floor, multiplication tables
DIVISION	Bottle tops, marbles, stones, sticks, grains, multiplication tables
LENGTH	Books, pencils, rulers, sticks, bottles, metre rule, metre sticks
MASS	Masses of 1kg, soil, sand, beam balance
CAPACITY	Containers of different sizes, 1litre containers, sand soil water,5 litre containers
TIME	Clock face both analogue and digital
MONEY	Kenyan currency coins and notes/imitations up to sh.1000, classroom shop
POSITION AND DIRECTION	Charts showing a straight line, a turn to the left and a turn to the right
SHAPES	Cut- outs of rectangles, circles, triangles, ovals and squares of different sizes

Suggested Assessment Methods and Tools

1. Written tests and quizzes
2. Rating scales
3. Projects
4. Observation Schedules
5. Portfolio
6. Assessment Rubric
7. Questionnaire

NOTE

The following **ICT** devices may be used in the teaching/learning of mathematics at this level:

Learner digital devices (LDD), Teacher digital devices (TDD), Mobile phones, Digital clocks, Television sets, Videos, Cameras, Projectors, Radios, DVD

players, CD's, Scanners, Internet among other

Community Service Learning at Early Years Education (PP1&2 and Grade 1-3)

At this level, the goal of the CSL activity is to provide linkages between concepts learnt in the various Learning Activities and the real-life experiences. Learners begin to make connections between what they learn and the relevance to their daily life. CSL is hosted in the Environmental Activities learning area. The class teacher is expected to identify and guide learners to undertake age-appropriate whole-class integrated CSL activity within the school. The safety of the learners should also be taken into account when selecting the CSL activity. The following steps for the integrated CSL activity should be staggered across the school terms:

Steps in carrying out the integrated CSL activity	
1) Preparation	<ul style="list-style-type: none">● Determine the activity for the learners.● Map out the targeted core competencies, values and specific learning areas skills for the CSL activity● Identify resources required for the activity (locally available materials)● Stagger the activities across the term (Set dates and time for the activities)● Communicate to learners, parents/caregivers/guardians, school administration, teachers and other relevant stakeholders in the school community● Identify and develop assessment tools
2) Implementation of CSL Activity	<ul style="list-style-type: none">● Assigning roles to learners.● Ensure every learner actively participates in the activity● Observe learners as they carry out the CSL activity and record feedback.● Use an appropriate assessment tool to assess both the process and the product (Assess learner's work from the beginning to the end product)● Assess the targeted core competencies, values and subject skills.

3) Reflection on the CSL Activity

Conduct a self-evaluation session with learners on the integrated CSL activity undertaken by discussing the following:

- what went well and why?
- what did not go well and why,
- what can be done differently next time?
- what they have learnt.

There will be **one** integrated CSL activity that will be conducted **annually**. The thematic areas for the integrated CSL activity will be derived from the broader categories of the PCIs and concepts from the various Learning Areas. The teachers are expected to vary the themes yearly to allow learners to address different PCIs within their contexts. There should be a linkage between the skills from the learning areas and the themes.

The integrated CSL activity will take a Whole School Approach (WSA) where the entire school community is involved (learners, parents/caregivers/guardians, school administration, teachers). Parents/caregivers/guardians are key stakeholders in the planning and execution of the CSL activity. Although the teacher takes the lead role in the planning and integration of the CSL activity, learners will be expected to participate actively in the whole process.

The CSL activity provides an opportunity for the development of core competencies and the nurturing of various values. The teacher is expected to vary the core competencies and values emphasised in the activity yearly.

Assessment of the CSL Activity

Assessment of the integrated CSL activity will focus on 3 components namely: skills from various learning areas applied in carrying out the activity, and core competencies developed, and values nurtured. Assessment should focus on both the process and end product of the CSL activity. The teacher will assess learners in groups using various tools such as an observation schedule, checklist, rating scale or any other appropriate assessment tool.