



**REPUBLIC OF KENYA  
MINISTRY OF EDUCATION**

**PRE-PRIMARY SCHOOL CURRICULUM DESIGN**

**MATHEMATICAL ACTIVITIES**

**PRE-PRIMARY 1**

**FOR LEARNERS WITH VISUAL IMPAIRMENT**



**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**

*A Skilled and Ethical Society*

First Published in 2023

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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 Pre-Primary One curriculum designs for learners with Visual Impairment focus on competencies that learners are expected to attain at this level. Emphasis is the development of Pre literacy, Pre numeracy and Social skills.

The curriculum design presents National Goals of Education, essence statement, general and specific expected learning outcomes for the learning area as well as strands and sub strands. The design also outlines suggested learning experiences, suggested 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 design 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. Pre-Primary one is the entry class of pre-primary level in the reformed education structure.

The reviewed Pre-Primary one curriculum for learners with Visual Impairment lays the foundation for implementation of CBC at Pre-primary level. The curriculum provides opportunities for learners to focus in a field of their choice to form a foundation for further education at higher grades. This is very critical in the realization 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 Pre-Primary one curriculum designs for learners with Visual Impairment 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 Pre-Primary one and prepare them for smooth transition to Pre-primary 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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**STATE DEPARTMENT FOR BASIC EDUCATION**  
**MINISTRY OF EDUCATION**

## **ACKNOWLEDGEMENT**

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review 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 conceptualized the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (KICD 2017), that responds to the demands of the 21<sup>st</sup> 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 Pre-Primary one curriculum designs for learners with Visual Impairment 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 panellists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Pre-Primary one curriculum designs for learners with Visual Impairment. 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 the 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 Pre-Primary one and preparation of learners for transition to primary level.

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**DIRECTOR/CHIEF EXECUTIVE OFFICER**  
**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**

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## **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 competencies 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 embracing 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.



## LESSON ALLOCATION FOR PRE PRIMARY

S/No	Activity Area	Number of Lessons per week
1.	Language Activities	5
2.	Mathematical Activities	5
3.	Creative Activities	6
4.	Environmental Activities	5
5.	Religious Activities	3
	Pastoral Instruction Programme	1
<b>Total</b>		<b>25</b>

## SUGGESTED THEMES

### 1. MYSELF

- My body
- My clothes
- My friends
- My play objects

### 2. FAMILY

- Family members
- Clothes worn by family members

- Foods eaten

### 3. MY HOME

- Our house
- Buildings at home
- Utensils
- Furniture
- Animals
- Plants found at home
- Work done at home

### 4. MY NEIGHBOURHOOD

- My neighbour
- Families in the neighbourhood
- Importance of neighbour

## **5. MY SCHOOL**

- Teacher
- Class
- Things in my class
- Buildings and structures at school
- People at school
- Things at school
- Work done in school

## **Essence Statement**

Mathematical activities at the Pre-Primary level empower children to engage in basic analysis of problems and to develop appropriate solutions in day to day life. These activities have been adapted to suit the learner with visual impairment and help to develop sensory integration, mental processes that enhance logical and critical thinking, accuracy and problem solving skills; all of which are important building blocks for primary school readiness. The areas of focus include use of tactile diagrams and real objects that enhances learning and enjoyment. Digital devices with assistive technology have been used to facilitate the acquisition of the intended concept. They also enhance the learner's development and acquisition of basic pre-number, number, measurement and geometry skills during early years. It also prepares and equips the learner with skills that will enable them to handle mathematics in lower primary at ease.

## **General learning outcomes**

By the end of the pre-primary education, the learner with visual impairment should be able to:

- a) use acquired classroom skills to solve problems in daily life,
- b) demonstrate basic number concepts as a basis for future learning,
- c) demonstrate interest in measurement and dispositions in physical and social world,
- d) demonstrate basic geometrical concepts as a basis for future learning.

**SUMMARY OF STRANDS AND SUB STRANDS**

<b>S. No.</b>	<b>Strand</b>	<b>Sub Strands</b>	<b>Suggested Number of Lessons</b>
1	1.0 Pre-Number Activities	1.1 Sorting and Grouping	8
		1.2 Matching and Pairing	8
		1.3 Ordering	8
		1.4 Patterns	8
2	<b>2.0 Numbers</b>	2.1 Rote Counting	8
		2.2 Number Recognition	10
		2.3 Counting Concrete Objects	10
		2.4 Number Sequencing	10
		2.5 Number Writing	10
3	3.0 Measurement	3.1 Sides of Objects	10
		3.2 Mass (Heavy and Light)	10
		3.3 Capacity (how much a container can hold)	10
		3.4 Time (Daily Routines)	10
		3.5 Money (Kenyan currency -Ksh.1 coins)	10
		3.6 Area (Surface of Objects)	10
4	4.0 Geometry	4.1 Lines	4
		4.2 Shapes	6
<b>Total Number of Lessons</b>			<b>150</b>

**NOTE:**

The suggested number of lessons per Sub Strand may be less or more depending on the context.

<b>THEME 1.0: MY SELF</b>				
<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>1.0 PRE- NUMBER ACTIVITIES</b>	<b>1.1 Sorting &amp; grouping</b>  (8 lessons)	By the end of the sub strand, learner should be able to:  a) explore different colours, sizes, shapes or textures for discrimination, ( <i>for learner with low vision</i> ), b) explore different shapes, textures and sizes for discrimination ( <i>for learner with blindness</i> ), c) identify similarities among play objects in the environment for distinguishing one object from the other, d) identify differences among play objects in the environment, e) sort and group play objects by colour or size, ( <i>for learners with low vision</i> ) f) sort and group play objects by texture or	<ul style="list-style-type: none"> <li>• Learners with low vision are guided to: Position self as per individual learner’s visual needs in order to interact with different contrasting colours, sizes and shapes and note their names and what distinguishes them.</li> <li>• Learners with blindness are guided to manipulate: Rough objects to note the uneven and bumpy surface, their warm temperature and noisy effect they produce as they are touched that makes them different from smooth objects which are even, mostly of cool temperature and producing no sound when touched. Big objects and note they cannot fit in the palm of the hand that makes them different from small objects which can fit in the palm of the hand for familiarization.</li> <li>• Learners with low vision examines and talks about similarities of play objects according to colour, shape or sizes while the Learners with blindness are first guided on holding and releasing in order to manipulate play objects of different textures shapes and sizes to determine</li> </ul>	<ol style="list-style-type: none"> <li>1. Why do we group objects together?</li> <li>2. How can objects be similar?</li> </ol>

		<p>size, (<i>for learners with blindness</i>)</p> <p>g) appreciate the materials in the environment for their uniqueness and diversity.</p>	<p>their similarities and be given verbal descriptions of their colour (wood blocks with tactile cues, balls, toys, bottle tops)</p> <ul style="list-style-type: none"> <li>• Learners with low vision examines and talks about differences in play objects according to colour/texture/shape or sizes. Learners with blindness are first guided on holding and releasing in order to manipulate play objects of different textures shapes and sizes to determine their differences and are given verbal descriptions of their colour (wood blocks with tactile cues. balls, toys, bottle tops)</li> <li>• Learners with low vision are guided to position self as per learner individual visual needs in order to sort and group play objects according to colour, size and texture by discriminating and placing the play items in their respective boxes.</li> <li>• Learners with blindness are guided to sort and group play objects by texture or size by being given hand on hand guidance and verbal description of discriminating and placing in their respective boxes.</li> <li>• In pairs, the learners with low vision are guided to play games demonstrating sorting and grouping of play objects by one attribute. Learners with blindness are guided to play adapted games to demonstrate sorting and grouping of play objects by one attribute by being given hand on hand guidance and verbal</li> </ul>	
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			<p>description of activities that require the use of sight.</p> <ul style="list-style-type: none"> <li>• Learners share play objects and sort and group them according to one attribute.</li> <li>• Learners relate specific attributes to other objects experienced in the environment.</li> <li>• Learners are guided to sing songs related to sorting and grouping objects.</li> <li>• Learners are guided to collect, store or dispose objects in their respective learning corner or disposal area by being given one on one demonstration and verbal cues on position of disposal areas and learning corners.</li> <li>• Learners are guided to sort and group objects according to one attribute using digital devices with assistive technology or other adaptive resources.</li> </ul>	
<p><b>Core Competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and Collaboration:</b> The learner develops speaking skills as they talk clearly and effectively when discussing and explaining how to sort and group the play objects.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Responsibility:</b> The learner develops self-drive while engaging with the play materials for sorting and grouping.</li> </ul>				
<p><b>Pertinent and contemporary issues (PCIs).</b></p> <ul style="list-style-type: none"> <li>• <b>Environmental Cleanliness:</b> The learner develops environmental cleanliness while engaging in the collection and disposal of wastes generated from sorting and grouping activities, and storing play objects in their respective learning corners.</li> </ul>				

**Link to other activity areas:**

- **Language activities:** The learner develops language while naming and discussing with the sighted peers the colours of objects identified during sorting and grouped.
- **Creative activities:** The learner develops inventiveness while manipulating play objects by squeezing and releasing holding and dropping for development of fine motor skills.

**Suggested Resources:**

Locally available materials of different colours, and sizes such as flowers, pebbles, shells, paper cut outs, bottle tops, seeds, feathers, fruits, beads, shapes, pictures, wood blocks with tactile cues. balls, toys, bottle tops

<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>1.0 PRE- NUMBER ACTIVITIES</b>	<b>1.2 Matching and Pairing</b>  (8 lessons)	By the end of the sub-strand, the learner should be able to: a) identify similarities among clothes they wear on a daily basis (sameness/likeness or use), b) identify differences among clothes they wear on a daily basis (sameness/likeness or use), c) match similar clothes they wear on a daily basis (sameness/likeness or use), d) pair similar clothes they wear on a daily basis (sameness/ likeness or use),	<ul style="list-style-type: none"><li>• Learners with low vision are guided to first observe clothes or pictures with appropriate colour contrast of clothes they wear on a daily basis and talk about them.</li><li>• Learners with blindness are guided to listen to verbal descriptions of aspects that require sight on clothes they wear on daily basis, systematically explore some clothes they wear on daily basis in order to talk about their attributes.</li><li>• Learners with low vision are guided to select clothes with similar attributes and place them in well labelled coloured boxes by observing</li></ul>	<ol style="list-style-type: none"><li>1. Why do objects look alike?</li><li>2. How do we match objects?</li></ol>



		<p>e) appreciate the use of different clothes on a daily basis.</p>	<p>a demonstration. Learners with blindness are guided to select clothes of similar attributes by being given verbal descriptions of activities that require the use of sight, hand on hand demonstration and put them in assigned boxes with tactile cues.</p> <ul style="list-style-type: none"> <li>• Learners are provided with labelled boxes each containing clothes with the same attributes in order to pick a cloth from one labelled box and to match it with its corresponding cloth from another labelled box.</li> <li>• Learners plays games involving matching and pairing clothes according to likeness or sameness or use.</li> <li>• Learners talk about the use of clothes in their experiences at home and at school.</li> <li>• Learners sing songs or recites poems on the relationship of clothes they wear or on the use of clothes they wear on a daily basis.</li> <li>• Learners are guided to match and pair clothes according to one attribute using ICT devices with assistive technology or other adaptive resources.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <p><b>Communication and collaboration:</b> Speaking- The learner speaks clearly and effectively while naming and describing items as they work in groups or in pairs while matching and pairing clothes according to sameness likeness and use.</p>				

<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Unity:</b> The learner enhances cooperation while working together in pairs or in groups thus by sharing materials in groups while matching and pairing clothes.</li> </ul>
<p><b>Pertinent and contemporary issues (PCIs)</b></p> <ul style="list-style-type: none"> <li>• <b>Self- care:</b> The Learner relates clothes to their use in daily life (sweater to keep one warm so that they don't become sick)</li> </ul>
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Creative Activities:</b> The learners develop inventiveness while finding ways to match and pair clothes.</li> </ul>
<p><b>Suggested Resources:</b></p> <p>Different types of clothes (shorts, shirts, dresses, socks, sweater), boxes,</p>

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p><b>1.0</b> <b>PRE-NUMBER</b> <b>ACTIVITIES</b></p>	<p><b>1.3</b> <b>Ordering</b>  (8 lessons)</p>	<p>By the end of the sub-strand, the learner should be able to:</p> <p>a) Perform finger dexterity activities in readiness for finger muscle flexibility</p> <p>b) identify play objects in their environment for exploration,</p> <p>c) identify play objects of different sizes in the environment,</p>	<ul style="list-style-type: none"> <li>• Learners talk about different play objects in the environment.</li> <li>• Learners with blindness are guided to manipulate a variety of play items for familiarization, while learners with low vision observe and manipulate play items with appropriate colour contrast for identification.</li> <li>• Learners with blindness are guided to arrange up to five play objects according to size (small, big, short, long, tall) by being given one on one demonstration of placement of objects in order. Learners with low vision use play objects with contrasting colours to</li> </ul>	<p>1. How do we identify long objects? 2. Why do we order items?</p>

		<p>d) use appropriate vocabulary related to ordering for effective communication,</p> <p>e) arrange play objects according to size (small, big, short, long, tall) in ascending order,</p> <p>e) arrange up to five play objects according to size (small, big, short, long, tall) in descending order,</p> <p>f) appreciate different play objects or materials in the environment.</p>	<p>arrange according to size (small, big, short, long, tall)</p> <ul style="list-style-type: none"> <li>• Learners compares play objects of different sizes up to five.</li> <li>• In groups or in pairs the learners with low vision are guided to draw big and small objects on different surfaces. (Piece of paper, ground, chalk board). Learners with blindness are guided to make big and small lumps of clay or plasticine.</li> <li>• Learners are guided to arrange objects in ascending and descending order using ICT devices with assistive technology or other adaptive resources.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> Teamwork-The Learner recognizes the importance of team work while sharing ideas, working together and describing the sequence of arranging play items in order from biggest to smallest in groups.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Responsibility:</b> The Learner develops accountability as the learner handles play items appropriately and puts them back in their rightful place after use.</li> </ul>				
<p><b>Pertinent and contemporary issues (PCIs)</b></p> <ul style="list-style-type: none"> <li>• <b>Safety:</b> The learner takes precautions while manipulating and carefully observing safety of the concrete objects during the ordering activity.</li> </ul>				
<p><b>Link to other activity areas:</b></p> <p>Creative Activities- The Learner develops inventive thinking while finding unique ways to order the play objects for the development of fine motor skills.</p> <p>Language Activities – The Learner acquires and uses the vocabulary big and small, tall and short while describing the ordering sequence.</p>				

**Suggested Learning Resources:**

Sticks, wood blocks, plastic bottles, bottle tops

<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>1.0 PRE- NUMBER ACTIVITIES</b>	<b>1.4 Patterns</b>  (8 lessons)	By the end of the sub-strand, the learner should be able to: a) identify existing similarities in different play objects in the environment according to shape or colour, ( <i>for learners with low vision</i> ) b) identify existing similarities in different play objects in the environment according to shape, ( <i>for learners with blindness</i> ) c) arrange two different objects in an alternating manner to make patterns, d) appreciate the different types of play objects in the environment,	<ul style="list-style-type: none"><li>• Learners with low vision are guided to collect, observe and talk about different shapes or colours of play objects in the environment.</li><li>• Learners with blindness are guided to collect, and talk about different shapes of play objects in the environment by being given orientation of the environment and verbal cues on the position of different play items.</li><li>• Learners with blindness are guided to discuss similarities in different play objects they collected according to shape and listen to verbal descriptions of similarities in play objects according to colour while learners with low vision are guided to observe and discuss similarities in different objects according to colour or shape.</li><li>• Learners are guided to arrange play objects in an alternating manner to make a pattern. Learners with blindness are given verbal cues and one on one guidance on how to place objects along embossed border lines while learners with low vision to do so using play objects with appropriately contrasting colours.</li></ul>	<ol style="list-style-type: none"><li>1. Why do objects look alike?</li><li>2. How do we arrange objects?</li></ol>

		e) enjoy making different patterns with play objects found in the environment.	<ul style="list-style-type: none"> <li>• Learners guided to manipulate or observe a series engraved within two border lines with missing patterns to identify the missing play objects.</li> <li>• Learners are guided to fill in the missing objects in a series to make a pattern by being given verbal cues.</li> <li>• Learners in small groups discuss patterns made of the same shape.</li> <li>• In groups, the learner can make patterns using ICT devices with assistive technology or other adapted resources.</li> </ul>	
<b>Core Competencies to be developed:</b>				
<b>Creativity and imagination:</b> making connection- The learner comes up with different way of arranging patterns while identifying patterns with same similarities in different play objects and comes up with missing objects in a series to make a pattern.				
<b>Values:</b>				
<b>Respect:</b> The Learner exercises patience while going through challenges in identifying patterns when working in pairs or in groups.				
<b>Pertinent and Contemporary Issues (PCIs)</b>				
<b>Safety:</b> The Learner observes safety while manipulating, collecting and ordering play objects for making patterns in the environment.				
<b>Link to other activity areas:</b>				
<b>Creative activities:</b> The Learner develops creativity while creating patterns using different play objects.				
<b>Suggested Resources:</b>				
Flash cards with appropriate colour contrast, wood blocks, bottle tops, bottles, sticks, beads, twine thread, glue				

**Suggested Assessment Rubrics:**

<b>Level</b> <b>Indicator</b>	<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
Ability to: <ul style="list-style-type: none"> <li>• Sort and group objects according to different attributes in the environment.</li> <li>• Match and pair clothes they wear according to sameness or likeness or use.</li> <li>• order play items by different attributes</li> <li>• make patterns with different play objects found in the environment</li> </ul>	The learner demonstrates the four skills.	The learner demonstrates three skills	The learner demonstrates two skills	The learner demonstrates one skill or none.

<b>THEME 2.0: MY FAMILY</b>				
<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>2.0</b> <b>NUMBERS</b>	<b>2.1</b> <b>Rote counting</b>  (8 lessons)	By the end of the sub-strand, the learner should be able to: a) rote count numbers 1-10 for developing numeracy skills, b) rote count numbers 1-10 using actions for development of numeracy skills, c) enjoy rote counting in daily life.	<ul style="list-style-type: none"> <li>• Learners with low vision are guided in listening and reciting numbers 1-10 using actions (walk, clap, nod, tap, hop or stamp). Learners with blindness to be given hand on hand guidance on actions in order to rote count as they perform actions like (walking, clapping, nodding, hopping or stamping).</li> <li>• Learners are guided to sing songs mentioning family members as they rote count.</li> <li>• Learners with low vision are guided to perform singing games or rhymes related to rote counting. Learners with blindness are guided to perform singing games or rhymes related to rote counting by being given one on one demonstration and verbal descriptions of actions that require the use of sight.</li> <li>• Learners are guided to listen to radio and television educational programmes on rote counting.</li> <li>• Learners to watch or listen to audio visual clips on rote counting with actions - walk, clap, nod, tap, hop or stamp while being given verbal description of actions that require the use of sight.</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we count using actions?</li> <li>2. Why do you count numbers 1-10?</li> </ol>

**Core Competencies to be developed:**

- **Communication and collaboration:** The Learner develops teamwork as they contribute to group decision making in by participating in clapping activities on cue from one member

**Values:**

- **Patience:** The learner develops patience while taking time to rote count numbers 1-10.

**Pertinent and Contemporary Issues (PCIs)**

- **Safety:** The learner observes safety while rote counting numbers 1-10 using actions.

**Link to other activity areas:**

- **Creative activities:** The Learner creatively performs singing games or rhymes related to rote counting numbers 1-10 using actions.

**Suggested Resources:**

Real objects, adapted digital devices, television, radio



Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>2.0</b>  <b>NUMBERS</b>	<b>2.2</b> <b>Number recognition</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: a) recognize dots of the braille cell in different situations <i>(for learners with blindness)</i> , b) recognize objects with shapes of numbers in different situations <i>(for learners with low vision)</i> , c) identify print numerals 1-9 for development of numeracy skills <i>(for learners with low vision)</i> , d) identify braille numerals 1-9 for development of numeracy skills <i>(for learners with blindness)</i> , e) arrange number flash cards 1-9 for development of symbolic representation of numbers <i>(for learners with low vision)</i> , f) arrange braille cards 1-9 for development of symbolic representation of numbers <i>(for learners with blindness)</i> ,	<ul style="list-style-type: none"> <li>• Learners with blindness are guided to identify the arrangement of a braille cell on engraved pieces of wood, models, peg board.</li> <li>• Learners with low vision are guided to recite poems on shapes of numbers for example 1 like a stick while observing the shapes of objects that resemble different numbers.</li> <li>• Learners with blindness are guided to recite braille symbols denoting numbers 1 - 9 while learners with low vision are guided to sing a song about the shapes of numbers 1-9.</li> <li>• Learners with low vision are guided to look at models of numbers 1-9 in different contrasting colours for familiarization while learners with blindness manipulate peg boards, models of the braille numbers 1-9 for familiarization.</li> <li>• Learners with blindness are given one on one demonstration on positioning of self and braille number cards appropriately, placement of their fingers correctly on the braille paper and manipulation of the braille numbers for identification.</li> <li>• Learners with low vision are guided to position self as per learner individual</li> </ul>	1. Why do we identify numbers? 2. How do you arrange numbers?

		<p>g) appreciate use of numbers in day-to-day life experiences.</p>	<p>needs in readiness for identifying different numbers.</p> <ul style="list-style-type: none"> <li>• Learners with blindness are given step by step guidance to trail braille symbols denoting numbers 1-9 on braille work cards while learners with low vision are guided to identify numbers on flash cards with appropriate print.</li> <li>• In groups, the learners with blindness are guided to arrange numbers 1-9 on a surface by being given one on one demonstration of identification of the numbers and alignment of the numbers.</li> <li>• Learners with low vision are guided to identify numbers on flash cards with appropriate print and arrange them in ascending order on a surface.</li> <li>• In pairs, learners can sing and dance to songs related to numbers 1- 9 while holding number cards.</li> <li>• Learners are guided to play adapted number recognition games.</li> <li>• Learners to identify number numerals using ICT devices with assistive technology.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> Speaking: The Learner communicates clearly while talking to and listening to each other they play number recognition games in groups or pairs.</li> </ul>				
<p><b>Values:</b></p>				

<ul style="list-style-type: none"> <li>• <b>Love:</b> The Learner works together in small groups while playing number games.</li> </ul>
<p><b>Pertinent and Contemporary Issues (PCIs)</b></p> <ul style="list-style-type: none"> <li>• <b>Self-esteem:</b> The learner develops self-confidence as the learner successfully recognizes numbers numerals and braille number symbols.</li> </ul>
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Creative Activities:</b> The learner sings songs on numbers and model numbers</li> <li>• <b>Language activities:</b> The Learner develops vocabulary when associating spoken words and the number symbols (say the names of numbers.)</li> </ul>
<p><b>Suggested Resources:</b></p> <p>Number flash cards, charts, calendar, clay, plasticine.</p>

<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>2.0</b> <b>NUMBERS</b>	<b>2.3</b> <b>Counting concrete objects</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: a) count concrete objects 1-9 used by family members for development of numeracy skills, b) demonstrate one to one correspondence of number symbols (1-9) and a group of concrete objects used by family member,	<ul style="list-style-type: none"> <li>• Learners with low vision demonstrates counting objects 1 to 9 while learners with blindness are guided to manipulate and demonstrate counting objects 1 to 9.</li> <li>• Learners with low vision are guided to count concrete objects (1 to 9) used by family members (Plates, spoons, cups/mugs, sufuria, jugs, dishes, basins).</li> <li>• Learners with blindness are guided to manipulate as they count concrete object 1 to 9 used by family members (plates, spoons, cups/mugs, sufuria, jugs, dishes, basins)</li> </ul>	<ol style="list-style-type: none"> <li>1. How many objects are these?</li> <li>2. How many learners are in your group?</li> <li>3. How many boys or girls are in your group?</li> <li>4. Why do we match objects?</li> </ol>

		<p>c) enjoy counting concrete objects used by family members,</p> <p>d) appreciate the use of one-to-one correspondence in real life situations.</p>	<ul style="list-style-type: none"> <li>• Learners with low vision are guided to play counting games involving counting objects 1 to 9 used by family members while learners with blindness are guided to play counting games involving counting objects 1 to 9 used by family members by manipulating the objects.</li> <li>• Learners with low vision are guided to match numerals with concrete objects used by family members for numbers 1 to 9.</li> <li>• Learners with blindness are guided to manipulate braille cards with number symbols and concrete objects and match the braille number symbols with the concrete objects for numbers 1 to 9.</li> <li>• Learners are guided to count family members at home and report the number.</li> <li>• Learners counts objects from 1 to 9 using ICT devices with assistive technology.</li> <li>• Learners play video games using assistive technology on counting.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> Speaking. The learner speaks clearly and effectively while talking to and listening to each other as they count concrete objects accurately and match to the corresponding numerals in groups or pairs.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Unity:</b> The learner works together harmoniously in groups or in pairs to complete the task of matching concrete objects to numerals</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs)</b></p> <ul style="list-style-type: none"> <li>• <b>Safety:</b> The learners observe safety while manipulating and demonstrating correspondence of number symbols with concrete objects.</li> </ul>				

**Link to other activity areas:**

- **Creative Activities:** The learner sings and dances songs involving counting of concrete objects used by family members.
- **Environmental Activities:** Family concept in environmental activities is reinforced as the learner counts concrete objects used by family members.

**Suggested Resources:**

Plates, spoons, cups/mugs, sufuria, jugs, dishes, basins

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>2.0 NUMBERS</b>	<b>2.4 Number sequencing</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: a) identify number symbols 1-9 as indicated on print or braille number cards or charts for development of numeracy skills and for ordering numbers, b) arrange number cards in sequence 1-9, c) arrange number cards in sequence for completing sequence puzzles, d) enjoy arranging numbers in sequence in their day-to-day life.	<ul style="list-style-type: none"><li>• Learners with low vision are guided to randomly pick number cut outs or number cards with appropriate contrast and font in turns from a pile and identify the number symbols 1-9.</li><li>• Learners with blindness are guided to randomly pick braille number cards from a pile and identify number symbols 1-9</li><li>• Learners with low vision are guided to use appropriate print number cards or cut outs to demonstrate arranging numbers in sequence 1-9. Learners with blindness are guided to use braille number cards to demonstrate arranging of numbers 1-9.</li><li>• Learners with low vision are guided to arrange appropriate print number cards 1-9 in sequence while the learners with blindness to arrange braille number cards 1-9.</li></ul>	<ol style="list-style-type: none"><li>1. How do you identify number symbols?</li><li>2. How do you arrange number cards in sequence</li><li>3. Why do you arrange numbers in sequence?</li></ol>

			<ul style="list-style-type: none"> <li>• Learners can complete missing numbers in sequence by placing the appropriate print or braille number cards and cut outs braille number cards.</li> <li>• Learners are guided to sing songs on a number sequence comprising numbers 1-9 as they mention their family members.</li> <li>• Learners are guided to complete adapted number sequencing puzzles using ICT devices with assistive technology or play number sequencing games like finding a missing number hidden in the classroom.</li> </ul>	
<b>Core Competencies to be developed:</b>				
<ul style="list-style-type: none"> <li>• <b>Creativity and imagination:</b> communication and self-expression: The learner communicates ideas with confidence while working in pairs or in groups as they arrange numbers in sequence and using the sequencing skills to complete number puzzles.</li> </ul>				
<b>Values:</b>				
<ul style="list-style-type: none"> <li>• <b>Peace:</b> The learner harmoniously sings songs on number sequence comprising numbers 1-9.</li> </ul>				
<b>Pertinent and Contemporary Issues (PCIs)</b>				
<ul style="list-style-type: none"> <li>• <b>Hygiene:</b> The learner observes hygiene while sequencing number cards by not putting the cards in the mouth because they are dirty.</li> </ul>				
<b>Link to other activity areas:</b>				
<ul style="list-style-type: none"> <li>• <b>Creative Activities:</b> The concept of pattern is reinforced as the learner completes a number puzzle related to number sequencing.</li> </ul>				
<b>Suggested Resources:</b>				
Number cards, number chart, number cut out, braille number cards.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p><b>2.0</b></p> <p><b>NUMBERS</b></p>	<p><b>2.5</b></p> <p><b>Number writing</b></p> <p>(10 lessons)</p>	<p>By the end of the sub-strand, the learner should be able to:</p> <p>a) identify print or braille number symbols 1- 9 for development of numeracy skills,</p> <p>b) form number symbols 1-9 in three different ways like joining dots, tracing, modeling,</p> <p>c) form braille number symbols 1-9 in three different ways like pegging, modeling, sticking dots on surfaces <i>(for the learner with blindness),</i></p> <p>d) perform braille writing equipment orientation in readiness for writing, <i>(for the learner with blindness),</i></p> <p>e) write print or braille number symbols 1-9 on a surface, <i>(for the learner with blindness),</i></p>	<ul style="list-style-type: none"> <li>• Learners with blindness are guided to read numbers 1-9 on braille work cards while learners with low vision are guided to read the numbers with appropriate print on charts, flash cards and number cutouts hanging on a number tree or number house for familiarization.</li> <li>• Learners with low vision are guided to sit self as per learner’s individual visual needs in order to identify dotted numbers with appropriate print on cards and join the dots to form numbers 1-9.</li> <li>• Learners with blindness form numbers 1-9 by identifying missing pegs on peg boards and filling them in to form the numeral sign and corresponding number.</li> <li>• Learners with blindness are guided to familiarize with placing braille paper in a slate or braille machine or any other available writing equipment, hold braille writing equipment in readiness for writing braille numbers 1-9.</li> <li>• Learners with low vision uses tracing paper on bold numbers to trace numbers while</li> </ul>	<ol style="list-style-type: none"> <li>1. Why do we identify number symbols?</li> <li>2. How do we form these number symbols (1, 2, 3, 4, 5, 6, 7, 8, and 9)?</li> </ol>

		<p>f) enjoy writing print or braille number symbols 1-9 using ICT devices with assistive technology,</p> <p>g) appreciate the use of numbers in the family.</p>	<ul style="list-style-type: none"> <li>• Learners with blindness are guided to practise the braille cell and numeral sign repeatedly.</li> <li>• Learners with low vision are guided to write number symbols 1-9 on a surface. Learners with blindness are guided to write braille symbols denoting numbers 1-9 by being given one on one demonstration and step by step verbal description, on forming the numbers.</li> <li>• In pairs, Learners with low vision are guided to use ICT devices with assistive technology to form number symbols 1-9 while the learner with blindness is guided to listen to audio clips on braille dots denoting the numbers 1-9.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Imagination and creativity:</b> Exploration: The learner's imagination is enhanced while associating number symbols with different items in the environment.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Respect:</b> The learner exercises patience and persistence during the process of learning to write the number symbols as they work in pairs and in groups to form numbers.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs)</b></p> <ul style="list-style-type: none"> <li>• <b>Safety:</b> The learner observes safety while exploring the writing surface and writing materials using hands and being careful not to eat plasticine or clay as they model number symbols.</li> </ul>				
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Creative Activities:</b> The skill of modeling is enhanced as the learner form numbers.</li> </ul>				



**Suggested Resources:**

Plasticine, pebbles, number charts, number flashcards, dice, writing surfaces, chalk, counters(sticks)

**Suggested Assessment Rubrics:**

<b>Level</b> <b>Indicator</b>	<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
Ability to: <ul style="list-style-type: none"> <li>• rote count numbers 1-9</li> <li>• recognize number symbols from 1-9 in different contexts.</li> <li>• count concrete objects used by family members.</li> <li>• order numbers in sequence from 1-9.</li> <li>• write number symbols 1-9.</li> </ul>	The learner demonstrates the five skills	The learner demonstrates three to four skills	The learner demonstrates two skills	The learner demonstrates one skill or none.

<b>THEME 3.0: MY HOME</b>				
<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>3.0 MEASUREMENT</b>	<b>3.1 Sides of objects</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: a) identify concrete objects found at home, b) identify sides of concrete objects found at home, c) compare sides of concrete objects found at home. (long, short), d) enjoy identifying sides of concrete objects at home as long or short.	<ul style="list-style-type: none"> <li>• In groups or in pairs learners are guided to watch or listen to audio visual clips on concrete objects found at home. Learners with blindness to be given verbal descriptions of phenomena that require the use of sight.</li> <li>• Learners with low vision are guided to interact with some concrete objects found at home. Learners with blindness do so by being given verbal descriptions as they manipulate the concrete objects for familiarization and then talk about them.</li> <li>• Learners with blindness are guided to identify sides of concrete objects found at home by being given one on one demonstration of noting tactile cues on position of the sides and differentiation of the sides. (box, table, bar soap, chair)</li> <li>• Learners with blindness are given orientation on identifying long and short by being given long and short items to manipulate for differentiation. Learners with low vision are guided to look at long and short objects for differentiation.</li> <li>• Learners with low vision are guided to compare sides of concrete objects with</li> </ul>	<ol style="list-style-type: none"> <li>1. How do we identify concrete objects?</li> <li>2. How do we compare sides of concrete objects?</li> </ol>

			<p>appropriate contrast found at home as long or short. Learners with blindness to be given one on one demonstration of comparing objects found at home using tactile cues and verbal descriptions as long or short.</p> <ul style="list-style-type: none"> <li>• In groups, learners are guided to play with concrete objects with different sides found at home.</li> <li>• Learners watches or listens to an audio-visual clip of concrete objects with long and short sides. Learners with blindness are given verbal descriptions of phenomena that require the use of sight.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> speaking: The learner talks to each other and works together in groups comparing sides of objects.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Love:</b> The learner shares play objects while counting sides of objects in pairs groups.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs)</b></p> <ul style="list-style-type: none"> <li>• <b>Safety:</b> The learner observes safety as they identify sides of objects (be aware of sharp and rough sides)</li> </ul>				
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Language Activities:</b> The learner acquires vocabulary such as long and short.</li> </ul>				
<p><b>Suggested Resources:</b> Carton, table, bar-soap, chair</p>				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p><b>3.0</b></p> <p><b>MEASUREMENT</b></p>	<p><b>3.2</b></p> <p><b>Mass (heavy and light)</b></p> <p>(10 Lessons)</p>	<p>By the end of the subs strand, the learner should be able to:</p> <p>a) lift two different concrete objects found at home,</p> <p>b) identify heavy and light concrete objects found at home,</p> <p>c) appreciate heavy or light concrete objects found at home.</p>	<ul style="list-style-type: none"> <li>• Learners with low vision are guided to demonstrate lifting heavy and light concrete objects found at home while learners with blindness are guided to manipulate concrete objects found at home and demonstrate lifting heavy and light objects (spoon, pans, cups, plates, sufuria)</li> <li>• Learners with low vision are guided to identify heavy and light concrete objects found at home and group them differently while learners with blindness are guided to manipulate a variety of concrete objects found at home and identify heavy and light objects and group them separately.</li> <li>• Learners with low vision are guided to carefully play games involving lifting of heavy and light concrete objects. (play on a seesaw; back-to-back lifting).</li> <li>• Learners with blindness are guided to play games involving lifting of heavy and light concrete objects by being given verbal description of phenomena that require the use of sight and one on one demonstration. (play on a seesaw; back-to-back lifting)</li> </ul>	<ol style="list-style-type: none"> <li>1. How do we identify heavy and light objects?</li> <li>2. Why are objects heavy or light?</li> </ol>

			<ul style="list-style-type: none"> <li>Learners are guided to watch/listen to an audio-visual clip on lifting heavy and light concrete objects.</li> </ul>	
<b>Core competencies to be developed:</b> <ul style="list-style-type: none"> <li><b>Learning to learn:</b> The learner lift heavy and light objects.</li> </ul>				
<b>Values:</b> <ul style="list-style-type: none"> <li><b>Unity:</b> The learners take turns in lifting objects.</li> </ul>				
<b>Pertinent and Contemporary Issues (PCIs):</b> <ul style="list-style-type: none"> <li><b>Safety:</b> The learner carefully plays games involving lifting of heavy and light objects.</li> </ul>				
<b>Link to other activity areas:</b> <ul style="list-style-type: none"> <li><b>Creative activities</b> - The learner develops eye-hand coordination and gross motor skills as they lift objects.</li> <li><b>Language activities</b>- The learner acquires vocabulary heavy and light.</li> </ul>				
<b>Suggested Resources:</b> Spoons, pans, cups, plates, sufuria, bar soap				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>3.0 MEASUREMENT</b>	<b>3.3 Capacity (how much a container can hold)</b>  (10 lessons)	By the end of the sub strand, the learner should be able to: a) fill and empty big and small containers with water or sand, b) identify how many small containers fill a big one. (up to 9 counts), c) enjoy filling and emptying containers with water and sand.	<ul style="list-style-type: none"> <li>• Learners are guided to move safely in the environment and collect big and small containers to be used for filling and emptying. The learner with blindness to be given verbal and tactile cues on locating the containers.</li> <li>• Learners with low vision are guided to position themselves as per learner individual need in order to fill and empty containers using coloured water or contrasting containers and to be guided to locate cues on when a container is full.</li> <li>• Learners with blindness are guided to fill empty containers by being given tactile cues on containers, verbal cues on how much more water to fill, and one on one demonstration on phenomena that require the use of sight.</li> <li>• In pairs, learners to be guided to tell how many small containers can fill a big ones with water or soil. (up to 9 counts)</li> <li>• Learners are guided to watch or listen to an audio-visual clip on filling and emptying containers.</li> </ul>	How many small containers can fill the big container?
<b>Core competencies to be developed:</b> <ul style="list-style-type: none"> <li>• <b>Critical thinking and problem solving:</b> The learner finds out how many small containers can fill a big one.</li> </ul>				
<b>Values:</b> <ul style="list-style-type: none"> <li>• <b>Responsibility:</b> The learner fills and empties containers without spilling over water or sand.</li> </ul>				

<p><b>Pertinent and Contemporary Issues (PCIs):</b></p> <ul style="list-style-type: none"> <li>• <b>Hygiene:</b> The learner observes hygiene as they do emptying and filling activities (not to drink dirty water)</li> </ul>
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Environmental activities:</b> The learner uses natural resources of the environment like water and soil to fill and empty containers.</li> </ul>
<p><b>Suggested Resources:</b></p> <p>Containers of various sizes, water sand</p>

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>3.0 MEASUREMENT</b>	<b>3.4 Time (Daily routines)</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: a) identify three daily routine activities they do before going to school, b) identify three daily routine activities they do after going to school, c) identify vocabulary related to time (morning, noon, evening), d) arrange pictures of daily activities in order that is morning,	<ul style="list-style-type: none"> <li>• Learners are guided to Identify and talk about three daily routine activities before and after going to school in appropriate order</li> <li>• Learners are guided to talk about activities related to time (morning, noon, evening)</li> <li>• In groups, learners with low vision are guided to observe three pictures with appropriate colour contrast showing various daily routine activities while giving verbal descriptions of the pictures to learners with blindness to form a mental image and explain the order of the daily routines.</li> <li>• Learners with blindness to manipulate items representing various daily</li> </ul>	<ol style="list-style-type: none"> <li>1. Why do we identify daily routine activities?</li> <li>2. How do you arrange pictures or items related to daily activities?</li> </ol>

		<p>noon, evening (<i>for learners with low vision</i>),</p> <p>e) arrange items of daily activities in order that is morning, noon, evening (<i>for learners with blindness</i>),</p> <p>f) enjoy arranging pictures of daily activities in order.</p>	<p>routine activities and talk about how they relate to different times of the day.</p> <ul style="list-style-type: none"> <li>• In groups, learners with low vision arranges pictures with appropriate colour contrast showing various daily routine activities in order.</li> <li>• In groups, learners with blindness arranges items representing various daily routine activities in order.</li> <li>• Learners are guided to sing songs on daily routines.</li> <li>• Learners are guided to watch or listen to an audio-visual clip-on activities of the daily routine. Learners with blindness to be given verbal descriptions of activities that require the use of sight.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> The learner talks to and works with each other in groups as they arrange pictures of various daily activities.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Responsibility:</b> The learner cooperates with one another in groups while arranging pictures of different daily activities.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b></p> <ul style="list-style-type: none"> <li>• <b>Safety:</b> The learner observes home arrival times (not to walk late in the evening alone)</li> </ul>				
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Language Activities:</b> The learner tells various daily activities relating them to the vocabulary morning, noon and evening.</li> </ul>				
<p><b>Suggested Resources:</b></p>				



Pictures and picture cut outs showing children doing different activities at different times of the day (morning, noon & evening)

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>3.0 MEASUREMENT</b>	<b>3.5 Money (Kenyan currency) Coins - Ksh. 1 coins</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> <li>identify Kenyan currency in one-shilling coin used at home,</li> <li>count money in one-shilling up to 9,</li> <li>trace one shilling Kenyan coin (<i>for learners with low vision</i>),</li> <li>form an image of a Kenyan sh.1 coin. (<i>for learners with blindness</i>),</li> <li>enjoy counting money in sh.1-coin up to 9.</li> </ol>	<ul style="list-style-type: none"> <li>In pairs, learners with low vision are guided to look at and talk about Kenyan sh.1 coin while learners with blindness are guided to manipulate and talk about Kenyan sh.1 coin.</li> <li>Learners with low vision are guided to identify Kenyan sh.1 coins while learners with blindness manipulate and identify Kenyan sh.1 coins.</li> <li>Learners with low vision are guided to count money in 1-shilling coin up to 9 in turns, while learners with blindness are guided to manipulate and count money in 1-shilling coin up to 9 in turns.</li> <li>In groups, learners with low vision are guided to use appropriate paper to trace Kenyan sh.1 coin. Learners with blindness are guided to</li> </ul>	<ol style="list-style-type: none"> <li>How can you identify one-shilling coins in Kenyan currency?</li> <li>Why do we count money?</li> </ol>

			<p>use clay or plasticine to form an image of a Kenyan sh.1 coin by pressing it on the clay or plasticine and then manipulate the image formed by the coin.</p> <ul style="list-style-type: none"> <li>• Learners are guided to watch or listen to an audio-visual clip on 1 Kenyan shilling coin. The learner with blindness listens to a verbal descriptions of a Kenyan sh.1 coin.</li> </ul>	
<p><b>Core Competence to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> The learner talks and listens to each other while counting sh.1 coins in groups.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Unity:</b> The learner takes turns while counting sh1. Coins in their groups.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b></p> <ul style="list-style-type: none"> <li>• <b>Financial literacy:</b> The learner is guided to identify and talk about Ksh.1 coin</li> </ul>				
<p><b>Link to other activity areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Creative activities:</b> The learner uses fine motor skills to trace Ksh.1 coin.</li> </ul>				
<p><b>Suggested Resources:</b></p> <p>Ksh.1 Coins, papers, pencils,</p>				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>3.0 MEASUREMENT</b>	<b>3.6</b> <b>Area</b> <b>(surface of objects)</b>  (10 lessons)	By the end of the sub-strand, the learner should be able to: a) observe different surfaces of models of objects found at home, b) Manipulate different surfaces of models of objects found at home, c) identify surfaces of different models of objects found at home, d) cover the surfaces of models of different objects found at home using smaller objects, e) appreciate different surfaces in the environment.	<ul style="list-style-type: none"> <li>• Learners with low vision is guided to observe different surfaces of models of objects found at home. (tables, chairs, stools) while learners with blindness are guided to tactually experience the whole surface of different surfaces by touching and listening to verbal descriptions of the surfaces.</li> <li>• Learners are guided to move in a safe environment and identify different surfaces in the environment.</li> <li>• Learners with low vision are guided to identify smaller models of items found at home of contrasting colours, to cover larger surfaces.</li> <li>• Learners with blindness are guided to do so by being given one on one demonstration of placing the smaller items on larger items. (Stool, chair, table) found at home using smaller objects. (bottle tops, small blocks)</li> <li>• Learners with low vision are guided to shade or colour surfaces of drawn objects using contrasting colours for clarity while learners with blindness could be guided to use different textures like sand or cotton to apply on plane surfaces with tactual</li> </ul>	<ol style="list-style-type: none"> <li>1. How many small</li> <li>2. pieces can cover this surface?</li> <li>3. Why do we need to identify surfaces of different models?</li> <li>4. How else can we cover these surfaces?</li> </ol>

			outline while being given verbal descriptions.	
<b>Core Competencies to be developed:</b>				
<ul style="list-style-type: none"> <li>• <b>Critical thinking and problem solving:</b> The learner covers and finds out pieces that can cover a surface</li> </ul>				
<b>Values:</b>				
<ul style="list-style-type: none"> <li>• <b>Love:</b> The learner shares materials fairly while working in groups.</li> </ul>				
<b>Pertinent and Contemporary Issues (PCIs):</b>				
<ul style="list-style-type: none"> <li>• <b>Hygiene:</b> The learner is guided not to put small objects used in covering surfaces in the mouth because they are dirty.</li> </ul>				
<b>Link to other activity areas:</b>				
<ul style="list-style-type: none"> <li>• <b>Language activities:</b> The learner acquires vocabulary “big” and “small” as they cover surfaces of objects.</li> </ul>				
<b>Suggested Resources:</b>				
Tables, chairs. Desks, stool, bottle				

**Suggested Assessment Rubrics:**

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to: <ul style="list-style-type: none"> <li>• compare sides of objects found at home.</li> <li>• identify heavy and light objects found at home.</li> <li>• illustrate how much different containers can hold.</li> <li>• order daily routine from morning to evening</li> <li>• identify Kenyan currency coins up to Ksh 1</li> </ul>	The learner demonstrates the six skills.	The learner demonstrates four to five skills	The learner demonstrates two to three skills	The learner demonstrates one skill or none.

<ul style="list-style-type: none"> <li>recognize surfaces of different objects found at home.</li> </ul>				
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<b>THEME 4.0: MY SCHOOL</b>				
<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>4.0</b> <b>GEOMETRY</b>	<b>4.1 Lines</b>  (4 lessons)	By the end of the sub-strand, the learner should be able to:  a) identify lines (straight and wavy) on objects found at school, b) form lines (straight, wavy) using concrete objects found in school, c) enjoy forming lines using concrete objects found in school.	<ul style="list-style-type: none"> <li>Learners with low vision are guided to look at different lines on well contrasting paper and talk about them while learners with blindness are guided to trail embossed lines and talk about them</li> <li>Learners with low vision are guided to move in a safe environment and observe objects with lines and talk about the lines.</li> <li>Learners with blindness are given; one on one orientation of the environment in order to move safely and access the objects with lines, verbal descriptions of various objects with lines and to manipulate the objects like books, charts, chalk boards within reach for familiarization.</li> <li>Learners with low vision to make straight lines by arranging up to 9 concrete objects one after the other from left to right while learners with blindness are guided to arrange concrete objects within a given boundary one after the</li> </ul>	<ol style="list-style-type: none"> <li>Why do we form lines?</li> <li>How do we form lines?</li> </ol>

			<p>other to form a straight line and be given verbal descriptions of the result.</p> <ul style="list-style-type: none"> <li>• Learners are guided to use clay to model straight lines by being given one on one demonstration, step by step verbal description and feedback on lines made.</li> <li>• Learners with blindness are guided to form wavy lines by first manipulating embossed wavy lines for familiarization and being given one on one demonstration of sticking sticks on a surface in alternating manner to form wavy lines.</li> <li>• Learners with low vision could be guided to look at bold wavy lines on contrasting paper and make wavy lines using clay sticks or thread or join provided dots that form wavy lines.</li> <li>• Learners to watch or listen to audio visual clips of children singing while moving on straight and wavy lines. Learners with blindness to be given verbal descriptions of the visual aspects of the video.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication and collaboration:</b> The learner works together in groups to form straight and wavy lines.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• <b>Unity:</b> The learner cooperates with one another while working in groups to form straight and wavy lines.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b></p> <ul style="list-style-type: none"> <li>• <b>Hygiene:</b> The learner is guided not to put learning materials in their mouth while forming lines for they can get infections.</li> </ul>				

**Link to other activity areas:**

- **Language activities:** The learner acquires new words like line, straight, wavy. Pre-writing skills (Left-right orientation)- learners arrange 9 objects on a straight line from left to right

**Suggested Resources:**

Books, charts, chalk boards, ropes, strings

<b>Strand</b>	<b>Sub-Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>4.0 GEOMETRY</b>	<b>4.2 Shapes</b>  (6 lessons)	By the end of the sub-strand, the learner should be able to:  a) identify shapes of objects found in school (rectangle, circle, triangle), b) form shapes using concrete objects found in school like rectangle, circle, triangle, c) model shapes like rectangle, circle, triangle, d) appreciate shapes identified in school.	<ul style="list-style-type: none"><li>• Learners are guided to name objects in school and talk about shapes found in the objects like books, black board, roof, window, clock, counting sticks.</li><li>• Learners are given hand on hand guidance in interacting with shapes and relating them to their names.</li><li>• Learners are guided to form shapes - rectangle, circle, triangle (by arranging concrete objects one after the other or by joining dots).</li><li>• Learners are guided to model and name shapes -rectangle, circle, and triangle an</li><li>• In groups, learners are guided to sort and group objects or cut outs of shapes and assign them to specific boxes or containers.</li><li>• Learners with low vision are guided to colour and paint cut outs of different shapes using appropriate colour contrast.</li></ul>	<ol style="list-style-type: none"><li>1. How do we identify lines?</li><li>2. How do we form shapes using concrete objects?</li></ol>

			<ul style="list-style-type: none"> <li>• Learners with blindness are guided to trail embossed shapes and be given different colours accompanied with their descriptions and tactile marks representing them to use to colour within the raised border line of the shapes.</li> <li>• Learners are guided to watch or listen to audio visual clips of different shapes.</li> </ul>	
<b>Core competencies to be developed:</b>				
<ul style="list-style-type: none"> <li>• <b>Imagination and creativity:</b> The learner forms different shapes by modeling and joining dots/counting sticks.</li> </ul>				
<b>Values:</b>				
<ul style="list-style-type: none"> <li>• <b>Responsibility:</b> The learner works in groups to accomplish the given task.</li> </ul>				
<b>Pertinent and Contemporary Issues (PCIs):</b>				
<ul style="list-style-type: none"> <li>• <b>Hygiene:</b> The learner is guided not to put learning materials in their mouth while forming shapes for they can get infections</li> </ul>				
<b>Link to other activity areas:</b>				
<ul style="list-style-type: none"> <li>• <b>Creative Activities:</b> The learner is guided to use shapes like rectangles, circles and triangles to form patterns.</li> </ul>				
<b>Suggested Resources:</b>				
Books, charts, chalk boards, ropes, string roofs, window, clock, counting sticks				



**Suggested Assessment Rubrics:**

<b>Level</b> <b>Indicator</b>	<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
Ability to: <ul style="list-style-type: none"> <li>• identify lines (straight and wavy) on objects found at school</li> <li>• form lines (straight, wavy) using concrete objects found in school</li> <li>• identify shapes on objects found in school</li> <li>• form shapes using concrete objects found in school (rectangle, circle, triangle)</li> </ul>	The learner demonstrates the four skills	The learner demonstrates three skills	The learner demonstrates two skills	The learner demonstrates one skill or none.