ACTIVITIES CURRICULUM

MATHEMATICS GRADE 1

GENERAL LEARNING OUTCOMES

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

- Demonstrate mastery of number concepts by working out problems in day to day life,
- Apply measurement skills to find solutions to problems in a variety of contexts,
- Describe properties of geometrical shapes and spatial relationships in real life experiences

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
1.0 Numbers	1.1 Number Concept (20 lessons)	By the end of the sub-strand, the learner should be able to: A. sort and group objects according to different attributes within the classroom, B. pair and match objects in the environment, C. order and sequence objects in ascending and descending order, D. make patterns using real objects, E. recite number names in order up to 50, F. represent numbers 1-30 using concrete objects, G. demonstrate through counting that a group in all situations has only one count, H. appreciate the use of sorting and grouping items in day to day activities.	• Learners in pairs/groups to collect different types of safe objects. • Learners in pairs/groups to sort objects with same attribute and group them together. • Learners to play digital games involving sorting and grouping according to different attributes. • Learners in pairs/groups to pair and match objects to establish equal to, more than and less than. • Learners to order objects according to size from smallest to biggest and vice versa. • Learners to make patterns using real objects. • Learners to recite number names up to 50. • Learners to represent numbers 1-30 using concrete objects as well as their body parts. • Learners to demonstrate that any given group has only one count. • Learner in pairs/groups to collect and sort litter in the environment and put it in various groups according to an attribute of their choice and give reasons for the grouping. • Learners in pairs/groups could assist in arranging, edible items like fruits, cabbages according to size and colour in the school store. • Learners could visit a market for them to observe the sorting and grouping of fruits and vegetables	1) How can we find out which group has more objects than another? 2) How can we group items?

1) How can we find out which group has more objects than another?
2) How can we group items?

Link to PCI's: **Life skills:** self-awareness and self-esteem- when using body parts in counting. **ESD: DRR;** safety- when collecting items and litter in the environment, environmental awareness-doŶ't litteđ the environment.	**Link to Values:** • responsibility • unity
Link to other learning areas: • Environmental activities • Religious activities • Language activities	**Suggested Community Service Learning Activities:** Learners to assist in collecting and sorting litter in their locality and observe how it is disposed.
Suggested non-formal activity to support learning: Learners to count trees in the school compound.	**Suggested assessment:** Oral questions, written exercise, observation.

Assessment Rubrics

Exceeds expectations	**Meets expectations**	**Approaches expectations**	**Below expectations**
Correctly: sorts and groups, pairs and matches, orders and sequences, recites numbers 1-50, represents numbers 1-30 using concrete objects and beyond	Correctly: sorts and groups, pairs and matches, orders and sequences, recites numbers 1-50, represents numbers 1-30 using concrete objects.	Inconsistently: sorts and groups, pairs and matches, orders and sequences, recites numbers 1-50, represents numbers 1-30 using concrete objects.	Major inaccuracies in: sorting and grouping, pairing and matching, ordering and sequencing, reciting numbers 1-50, representing numbers 1-30 using concrete objects.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
1.0 Numbers	1.2 Whole Numbers (25 lessons)	By the end of the sub-strand, the learner should be able to: A. count numbers forward and backward up to 100, B. represent numbers 1-50 using concrete objects, C. identify place value of ones and tens, D. read and write numbers 1-50 in symbols, E. write numbers 1-10 in words, F. identify missing numbers in number patterns up to 20, G. appreciate number patterns by creating and extending patterns during play activities.	Learners in pairs/groups to count by 1's and 2's up to 20 starting from any point using concrete objects as well as body parts. • Learners to take turns in counting by: • -5's up to 50 starting from zero • -10's up to 100 starting from zero. • Learners in pairs/groups to count by1's and 2 are using a number line. • Learners in pairs/groups to play games that involve representing numbers 1-50 using concrete objects. • Learners to identify place value of ones and tens. • Learners in pairs to recite and write numbers 1-50 in symbols. • Learners to practice writing numbers 1-10 in words. • Learners to identify missing numbers in number patterns up to 20. • Learners in pairs to create patterns with numbers up to 20 and share with other groups. • Learners to play digital games involving whole numbers. • Learners to role play a cashier in day to day life activities such as a cashier counting 5 shilling coins	How many ways can we count from 1-20?

Core Competences to be developed: learning to learn, communication and collaboration, critical thinking and problem solving, digital literacy.	
Link to PCI's: • **Life skills:** self-awareness and self-esteem- when using body parts in counting. • **ESD: DRR;** safety -when collecting items and litter in the environment, environmental awareness-don't litter the environment	**Link to values:** • responsibility • unity
Link to other learning areas: • Environmental activities • Religious activities • Language activities	**Suggested Community Service Learning Activities:** Learners to assist in putting objects in groups of 2's, 5's and 10's together in community activities.
Suggested non-formal activity to support learning: learners to count different types of flowers in the school compound	**Suggested assessment:** • Oral questions • Written exercises • Observation

Assessment Rubrics

Exceeds expectations	**Meets expectations**	**Approaches expectations**	**Below expectations**
Correctly: counts up to100, represents numbers 1-50 using concrete objects, identifies place value of ones and tens, reads, writes numbers in symbols and words, works out missing numbers in number patterns and beyond	Correctly: counts up to 100, represents numbers 1-50 using concrete objects, identifies place value of ones and tens, reads, writes numbers in symbols and words, works out missing numbers in number patterns.	Inconsistently: counts up to 100, represents numbers 1-50 using concrete objects, identifies place value of ones and tens, reads, writes numbers in symbols and words, works out missing numbers in number patterns.	Major inaccuracies in: counting up to 100, representing numbers 1-50 using concrete objects, identifying place value of ones and tens, reading and writing numbers in symbols and words, working out missing numbers in number patterns.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
1.0 Numbers	1.3 Addition (25 lessons)	By the end of the sub-strand, the learner should be able to: A. Model addition as putting objects together, B. Use ' +' and ' =' signs in writing addition sentences, C. Add 2- single digit numbers up to a sum of 10, D. Add 3- single digit numbers up to a sum of 10 in different contexts, E. Add a 2- digit number to a 1- digit number without regrouping, horizontally and vertically with sum not exceeding 100, F. Add multiples of 10 up to 100 vertically, G. Work out missing numbers in patterns involving addition of whole numbers up to 100.	• Learners in pairs/groups to put two groups of objects together and count to get the total. • Learners to use ' + ' and ' = ' signs in writing addition sentences. • Learners to add 2- single digit-numbers by skipping on a number line. • Learners to add 2- single digit numbers using the family of 10. • Learners to add 2- single digit number by counting on. • Learners to add 3- single digit numbers using a number line. • Learners to add 3- single digit numbers by counting on. • Learners to add 3- single digit numbers using the family of 10. • Learners to add a 2- digit number to a 1- digit number without regrouping horizontally and vertically with sum not exceeding 100. • Learners to add multiples of 10 up to a 100 vertically. • Learners to play digital games involving addition. • Learners to make patterns involving addition with numbers up to 100.	**How can you add a 2- digit number to a 1- digit number?**
Core competences to be developed: communication and collaboration, critical thinking and problem solving, digital literacy.				

Link to PCI's: **ESD: DRR;** safety- when handling objects.	**Link to values:** • responsibility • unity • integrity
Link to other learning areas: • Environmental activities • Language activities	**Suggested Community Service Learning Activities:** learners to work out totals of items at home.
Suggested non-formal Activity to support learning: learners to plant flowers in patterns at school during their free time and count them.	**Suggested assessment:** oral questions, written exercise, observation.

Assessment Rubrics

Exceeds Expectations	**Meets Expectations**	**Approaching Expectations**	**Below Expectations**
Correctly: models addition, uses '+' and '=' signs, adds more than 2- digit numbers to 1- digit numbers using different strategies, adds 3- single digit numbers up to a sum of 10, adds multiples of 10 up to 100, works out missing numbers in patterns beyond 100.	Correctly: models addition, uses '+' and ' = 'signs, adds up to 2- digit numbers to 1- digit numbers using different strategies, adds 3- single digit numbers up to a sum of 10, adds multiples of 10 up to 100, works out missing numbers in patterns up to 100.	Inconsistently: models addition, uses' +' and' = ' signs, adds up to 2- digit numbers to 1- digit numbers using different strategies, adds 3- single digit numbers up to a sum of 10, adds multiples of 10 up to 100, works out missing numbers in patterns up to 100.	Major inaccuracies in: modeling addition, using '+' and ' = ' signs, adding up to 2- digit numbers to 1- digit numbers using different strategies, adding 3- single digit numbers up to a sum of 10, adding multiples of 10 up to 100, working out missing numbers in patterns up to 100.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
1.0 Numbers	**1.4.Subtraction** **(20 lessons)**	By the end of the sub-strand, the learner should be able to: A. Model subtraction as 'taking away' using concrete objects, B. Use the ' - ' and '='signs in writing subtraction sentences, C. Subtract single digit numbers, D. Subtract a 1- digit number from a 2-digit number based on basic addition facts, E. Use the relationship between addition and subtraction in working out problems involving basic addition facts, F. Subtract multiples of 10 up to 90, G. Work out missing numbers in patterns involving subtraction of whole numbers up to 100.	• Learners in pairs/groups to model subtraction using concrete objects. • Learners to use ' - ' and '=' signs in writing subtraction sentences. • Learners in pairs/groups to subtract by counting backwards • Learners in pairs/groups to subtract using the number line. • Learners to solve routine and non- routine problems involving subtraction of a 1-digit number from a 2- digit number based on basic addition facts. • Learners to create subtraction sentences related to basic addition facts. • Learners to use tablets to workout subtraction of multiples of 10 up to 90. • Learners in pairs /groups to create patterns involving subtraction.	**How do you subtract a single digit number from a 2-digit number?**

Core Competences to be developed: communication and collaboration, critical thinking and problem solving, digital literacy, creativity and imagination, citizenship, self- efficacy.	
Link to PCI's: **ESD: DRR;** safety- as learners handle objects.	**Link to Values:** • responsibility • unity
Link to other learning areas: • Environmental Activities • Language Activities	**Suggested Community Service Learning Activities:** Learners to collect litter from the environment.

Suggested non- formal activity to support learning: learners to plant trees in patterns in the school compound during their free time.	**Suggested Assessment:** Written exercise, observation, oral questions.

Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaching Expectations	Below Expectations
Correctly: models subtraction as taking away, uses '-' and ' =' signs to write subtraction sentences, subtracts single digit numbers, subtracts 1- digit numbers from 2- digit numbers based on basic addition facts, relates addition and subtraction in working out problems involving basic addition facts, subtracts multiples of 10 from more than 90 and works out missing numbers in patterns up to 100 and beyond.	Correctly: models subtraction as taking away, uses '-' and ' =' signs to write subtraction sentences, subtracts single digit numbers, subtracts 1- digit numbers from 2-digit numbers based on basic addition facts, relates addition and subtraction in working out problems involving basic addition facts, subtracts multiples of 10 from up to 90 and works out missing numbers in patterns up to 100.	Inconsistently: models subtraction as taking away, uses, uses '-' and ' =' signs to write subtraction sentences, subtracts single digit numbers, subtracts 1- digit numbers from 2- digit numbers based on basic addition facts, relates addition and subtraction in working out problems involving basic addition facts, subtracts multiples of 10 from up to 90 and works out missing numbers in patterns up to 100.	Major inaccuracies in: modeling subtraction as taking away, using '-' and' =' signs to write subtraction sentences, subtracting single digit numbers, subtracting 1- digit numbers from 2-digit numbers based on basic addition facts, relating addition and subtraction in working out problems involving basic addition facts, subtracting multiples of 10 from up to 90 and working out missing numbers in patterns up to 100.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
2.0 Measurement	2.1Length (10 lessons)	By the end of the sub-strand, the learner should be able to: A. Compare length of objects directly, B. Conserve length through manipulation, C. Measure length using arbitrary units.	• Learners in pairs/groups to compare objects directly to identify objects which are longer than, shorter than or same as. • Learners to place objects of equal length in different orientations and describe them using words such as longer than, shorter than and same as. • Learners in pairs /groups to measure lengths using different	A. How do you compare the length of two objects? B. Which objects can be used to measure the

			objects as arbitrary units and discuss the measurements from the various groups.	length of the teacher's table?

Core competencies to be developed: communication and collaboration, imagination and creativity, critical thinking and problem solving, self-efficacy.	
Link to PCI's: **ESD: DRR;** safety- as learners in handle objects.	**Link to values:** • responsibility • Integrity • unity
Link to other learning areas: • Environmental Activities • Language activities	**Suggested Community Service Learning Activities:** learners to plant trees /flowers using a stick to determine the distance between seedlings in religious institutions/ dispensaries.
Suggested non-formal Activity to support learning: learners to plant flowers in school spacing them equally.	**Suggested assessment:** written exercises, observation, oral questions.

Assessment Rubrics

Exceeds Expectations	**Meets Expectations**	**Approaches Expectations**	**Below Expectations**
Correctly: compares length directly, conserves length and measures length using arbitrary units and beyond.	Correctly: compares length directly, conserves length and measures length using arbitrary units.	Inconsistently: compares length directly, conserves length and measures length using arbitrary units.	Major inaccuracies in: comparing length directly, conserving length and measuring length using arbitrary units.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested learning experiences	Key Inquiry Question(s)
2.0 Measurements	2.2 Mass (10 lessons)	By the end of the sub-strand, the learner should be able to: A. Compare mass of objects directly, B. Conserve mass through manipulation, C. Measure mass using arbitrary units.	• Learners in pairs/groups use safe objects to identify those heavier than, lighter than or same. • Learners to use two objects of equal mass and a beam balance to demonstrate that change of shape does not change the mass of an object. • Learners in pairs/groups to use an identified mass to compare the mass of other objects using the words heavier than, lighter than or same as.	A. How can you compare the mass of two or more objects? B. What would you do to show that shape does not change mass? C. How can you show that an object is heavier than, lighter than or same as your mathematics textbook?

Core Competencies to be developed: Communication and collaboration in group work, critical thinking and problem solving, self-efficacy.	
Link to PCI's: • **ESD: DRR;** safety - in handling materials, animal welfare -feeding animals. • **Health education:** personal hygiene -appropriate size of materials. • **Citizenship:** honesty.	**Link to Values:** • responsibility • integrity • unity • respect
Links to other learning areas: • Environmental activities	**Suggested Community Service Learning Activities:** learners to assist neighbours in feeding animals by measuring quantities.

• Language activities • Music and movement and activities	
Suggested non-formal Activity to support learning: learners to compare mass of objects in the classroom.	**Suggested assessment:** written exercises, oral questions, observation.

Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Correctly: compares mass directly using the words heavier than, lighter than, and same as, conserves mass through manipulation, measures mass using arbitrary units and beyond.	Correctly: compares mass using the words heavier than, lighter than and same as, conserves mass through manipulation, measures mass using arbitrary units.	Inconsistently: compares mass using the words heavier than, lighter than and same as, conserves mass through manipulation, measures mass using arbitrary units.	Major inaccuracies in: comparing mass using the words heavier than, lighter than and same as, conserving mass through manipulation and measuring mass using arbitrary units.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
2.0 Measurement	2.3 Capacity (12 lessons)	By the end of the sub-strand, the learner should be able to: A. Compare capacity of containers directly, B. Conserve capacity through manipulation, C. Measure capacity using arbitrary units.	• Learners to empty and fill water in different containers to establish which holds more, which holds less and which holds the same. • Learners to identify and compare containers which holds more, less or same as. • Learners to fill containers of different shapes and sizes with water then empty into others so as to establish that some containers can hold the same amount although their shapes are different. • Learners to be given water, same size basins and different small containers. The learners to count the number of small containers they use to fill the basin.	**How can we find out which of two containers hold more, less or same as?**

Core Competencies to be developed: critical thinking and problem solving, communication and collaboration ,imagination and creativity, citizenship, self-efficacy.	
Link to PCI's: • **ESD: DRR;** safety in handling materials, Health education – appropriate size of materials and, environmental conservation as learners re- use containers they used in measuring capacity; animal welfare – watering animals. • **Citizenship**: honesty. • **Health education**: safety- as learners collect safe and appropriate containers. • **Life skills:** self-awareness- as learners work in groups.	**Link to values:** • responsibility • integrity • unity • respect
Link to other learning areas: • Environmental Activities • Language Activities	**Suggested Community Service Learning Activities:** learners to water trees and flowers around religious institutions, health centres and at home.
Suggested non-formal activity to support learning: learners to water school /class flowers.	**Suggested assessment:** written exercises, observation, oral. questions

Assessment Rubrics

Exceeds Expectations	**Meets Expectations**	**Approaches Expectations**	**Below Expectations**
Correctly: compares capacity of different containers using the terms holds more, less or same as, conserves capacity using containers of different shapes and sizes, measures capacity using arbitrary units and beyond.	Correctly: compares capacity of different containers using the terms holds more, less or same as, conserves capacity using containers of different shapes and sizes, measures capacity using arbitrary units.	Inconsistently: compares capacity of different containers using the terms holds more, less or same as, conserves capacity using containers of different shapes and sizes, measures capacity using arbitrary units.	Major inaccuracies in: comparing capacity of different containers using the terms holds more, less or same as, conserving capacity using containers of different shapes and sizes, measuring capacity using arbitrary units.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
2.0 Measurement	2.4 Time (8 lessons)	By the end of the sub-strand, the learner should be able to: A. Relate daily activities to time, B. Relate days of the week with various activities.	• Learners in pairs/groups to identify activities they do in the morning, afternoon and evening both at home and school. • Learners to sing songs/ rhymes related to days of the week. • Learners in pairs/groups to identify activities that take place during the days of the week	A. Which day of the week do you raise the school flag? B. Which day of the week do you worship?
Core competence to be developed: communication and collaboration, self-efficacy, citizenship				
Link to PCI's: • **Citizenship**: patriotism – the Kenyan flag. • **Health Education**: time to brush teeth, wash face, sleep, take meals time to plant, harvest, among other activities.			**Link to values:** • respect • responsibility • □ patriotism	
Link to other learning areas: • Environmental Activities • □ Language Activities			**Suggested Community Service Learning Activities:** learners to visit/help the needy during school holidays.	
Suggested non-formal activity to support learning: learners write school daily activities and recite during assembly.			**Suggested assessment**: oral questions**,** written exercises, observation.	

Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Correctly: relates daily activities to time, relates days of the week with various activities, recites days of the week and demonstrates more aspects of time.	Correctly: relates daily activities to time, relates days of the week with various activities, and recites days of the week.	Inconsistently: relates daily activities to time, relates days of the week with various activities, and recites days of the week.	Major inaccuracies in: relating daily activities to time, relating days of the week with various activities, reciting days of the week.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
2.0 Measurement	2.5 Money (8 lessons)	By the end of the sub-strand, the learner should be able to: A. Identify Kenyan currency coins and notes up to sh.100, B. Relate money to goods and services up to sh.100 in shopping activities, C. Differentiate between needs and wants in real life context, D. Appreciate spending and saving in real life situations.	• Learners in pairs/groups to sort out different Kenyan currency coins and notes according to their value up to sh.100. • Learners to put together coins and notes up to sh.100 according to their value and features. • Learners in pairs/groups to give their own experiences in relation to shopping activities. • Learners to discuss the value of items in the classroom shop up to sh.100. • Learners in pairs/groups to discuss items they cannot do without and those that are necessary but they can do without. • Learners in pairs/groups to identify needs and wants. • Learners to play digital games involving needs and wants. • Learners to give their own experiences on saving and spending of money. • Learners to role play buying and selling from the classroom shop	**How can you identify Kenyan currency coins and notes?**

Core competence to be developed: communication and collaboration, self-efficacy, citizenship, digital literacy.

Link to PCI's: • **ESD: DRR;** safety- as learners handle money. • **Citizenship:** patriotism-features on Kenya currency.	**Link to values:** • integrity • responsibility • honesty
Link to other learning areas: • Language activities • Religious activities • Environmental activities	**Suggested Community Service Learning Activities:** learners to sort money in places of worship and other functions.
Suggested non-formal Activity to support learning: learners to help sort money into various denominations with school cashier or in a school function	**Suggested assessment:** written exercises, oral questions, observation.

Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Correctly: identifies Kenyan currency coins and notes up tosh.100, relates money to goods and services and differentiates between needs and wants, and beyond.	Correctly: identifies Kenyan currency coins and notes up to sh.100, relates money to goods and services and differentiates between needs and wants.	Inconsistently: identifies Kenyan currency coins and notes up to sh.100, relates money to goods and services and differentiates between needs and wants.	Major inaccuracies in: identifying Kenyan currency coins and notes up to sh.100, relating money to goods and services and differentiating between needs and wants.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
3.0 Geometry	3.1 Lines (6 lessons)	By the end of the sub-strand, the learner should be able to: A. Draw straight lines for application in real life, B. Draw curved lines for application in real life situations.	• Learners to stand behind one another facing the same side and identify what they have formed as a straight line. • Learners in pairs/groups to mark two points on the ground and using a stick to draw a line joining the two points to come up with a straight line. • Learners to practice drawing straight lines on the ground and in their books. • Learners in groups to form a semi-circle and one of them to draw a	**What types of lines are there?**

			• Learners to practice drawing curved lines on the ground and in their books. • Learners could visit a water selling kiosk to observe how the water containers are arranged.	

Core-Competence to be developed: communication and collaboration, imagination and creativity, learning to learn.

Link to PCI's: • **ESD: DRR;** safety- as learners use sticks to draw. • **Life Skills**: self- awareness -when forming lines using their hands, inter- personal relationship.	**Link to Values:** • unity • responsibility • love
Link to other learning areas: • Movement and creative arts	**Suggested Community Service Learning Activities:** learners could visit a community function and assist in arranging seats in straight or curved
Suggested non- formal Activity to support learning: learners to arrange seats in straight lines in class during cleaning.	**Suggested assessment**: written exercises, observation, oral questions.

Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Correctly draws straight and curved lines and also other types of lines.	Correctly draws straight and curved lines.	Inconsistently draws straight and curved lines.	Major inaccuracies in drawing straight and curved lines.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
3.0 Geometry	3.2 Shapes (6 lessons)	By the end of the sub-strand, the learner should be able to: A. Identify rectangles, circles and triangles in the environment, B. Make patterns involving rectangles, circles and triangles, C. Appreciate the beauty of patterns in the environment.	• Learners in pairs/groups to sort and group different shape using one attribute. • Learners in pairs /groups discuss the types of lines that make rectangles, circles, triangles and name them. • Learners working individually to make patterns of their choice using the three shapes.	**What shapes can you identify in your school?**

			• Learners in groups make patterns, colour them and share with other groups.	

Core-Competence to be developed : communication and collaboration, imagination and creativity

Link to PCI's : **ESD: DRR;** safety-as learners pick objects to trace and when colouring the patterns.	**Link to Values:** • responsibility • unity
Link to other learning areas: • Movement and creative activities • Environmental activities	**Suggested Community Service Learning activities:** learners to visit the elderly and beautify their walls with patterns drawn on manila paper.
Suggested non-formal activity to support learning :learners could visit pre -school and decorate the walls using patterns drawn on manila paper.	**Suggested assessment:** written exercises, oral questions, observation.

Assessment Rubrics

Exceeds Expectations	**Meets Expectations**	**Approaches Expectations**	**Below Expectations**
Correctly identifies shapes and makes patterns using rectangles, circles, triangles and other shapes.	Correctly identifies shapes and makes patterns using rectangles, circles and triangles.	Inconsistently identifies shapes and makes patterns using rectangles, circles and triangles	Major inaccuracies in identifying shapes and making patterns using rectangles, circles and triangles.

SUGGESTED RESOURCES

SUB- STRANDS	RESOURCES
NUMBER CONCEPT	Sticks, stones, grains
WHOLE NUMBERS	Sticks, marbles ,stones grains ,a number line drawn on the ground/floor
ADDITION	Place value chart, abacus basic addition facts, number line drawn on the ground/floor, table, sticks, marbles ,stones, grains and many more
SUBTRACTION	Sticks, marbles, stones ,grains, basic addition facts table, number line drawn on the ground/floor
LENGTH	Books, pencils, sticks, bottles, rulers and others
MASS	Items of different mass such as books ,stones, pieces of wood, items of same mass
CAPACITY	Containers of different sizes, water, sand ,soil and others
TIME	Charts with days of the week and months of the year in order
MONEY	One shilling coins (copper, silver, small and big coins) sh.10, sh.20, sh.40 coins, sh.50 notes and classroom shop
LINES	Sticks, strings
SHAPES	Cut- outs of rectangles, circles, and triangles of different sizes

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, PɖojeÐtoɖs, Radios, DVD playeɖs, CD's, Scanners , Internet among others.