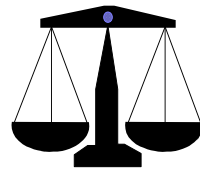


MINISTRY OF EDUCATION

REVISED CURRICULUM GUIDE

MATHEMATICS

GRADE 2



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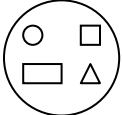
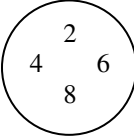
**CURRICULUM GUIDE
MATHEMATICS: GRADE 2**

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MATHEMATICS CURRICULUM GUIDE
GRADE 2
SETS

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Sets Number of objects in sets.	Classifying, grouping and counting objects.	Identify numbers of objects in a set not above 25.	Appreciate that objects in the environment serve the human group in various ways	Sets with objects not above 25.	Group objects into sets. - sets of ones up to nineteen. - sets of ten and ones up to nineteen. Identifying the number of objects in each set.	Group objects in sets of tens and ones.	<u>Science.</u> Classify objects in the environment as “once alive” and “ never alive”
Grouping sets of objects..	Classifying grouping and counting objects.	Group objects into sets given the number of members up to 25 in a set.	Work in groups. Share materials Value oneself as a member of the family.	Group objects into sets given the number of members up to 25 in a set.	Group objects into sets given the number of members. State the number of members. Write the number of members of each sets. Group things found in the classroom e.g. pens, pencils and lunch kits.	Draw sets of objects to represent the number given e.g. for 5, draw a set of five objects.	<u>Health Education.</u> List the items used to care the body e.g. a toothbrush, comb, and a bar of soap.
Comparing sets.	Comparing size of sets. Discussing Observing	Compare the size of sets.	Respect the views of others	Compare the size of sets.	Compare the size of sets using terms – "more than" and "less than", big, small, large, medium, and equal.	Compare the size of given sets using terms, more than, and less than. Describe sets as big, small, large, medium and	<u>Language Skills</u> Vocabulary e.g. big, small, medium, large.

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
						having the same number of objects.	
Forming sets.	Collecting materials. Forming sets.	Form sets of objects giving sets different names.	Exercise care in outdoor activities.	Form sets of objects giving sets different names.	Form sets of objects. Name each sets of objects. e.g. a set of: bottles, flowers plane shapes etc.	Give names to sets of objects drawn.   	Science Collect a variety of materials in the environment Language Skills Use phrases such as a flock of sheep, a herd of cattle, a class of pupil's etc.

NUMBER CONCEPTS

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
NUMBER CONCEPTS Grouping objects into sets	Grouping objects into sets Counting number of objects in sets	Group objects into sets Write corresponding	Respect others	Group objects into sets of tens and ones (up to 5 tens)	- Use a variety of materials e.g. popsicle sticks, match sticks,	Write numerals with their number names e.g. 14 – fourteen	Poetry Recite and dramatise rhymes with number

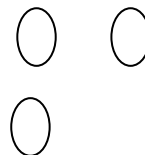


TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
of tens and ones	Writing	numerals and number names for the number of objects in each set		<p>and write corresponding numerals and number names for these numbers e.g</p> <p>Tens Ones</p> <p>11111 1111</p> <p>1 4</p> <p> fourteen</p> <p>11111 111</p> <p>11111 11</p> <p>11111 5</p> <p>11111 twenty-five</p> <p>2</p>	<p>the abacus, notation cards, base ten blocks bingo chips and tally charts to show:-</p> <p>- Sets of ones to 50</p> <p>- Sets of tens and ones up to 50.</p> <p>- Use tallies to record groups of tens and ones on a place value chart e.g. 14</p> <p>Tens Ones</p> <p>11111 1111</p> <p>11111 1111</p> <p>1 4</p>	<p>Match numerals with their names</p> <p>16 twenty</p> <p>20 sixteen</p> <p>Use the abacus to show sets of tens and ones (up to 50) and write the numerals and number names for each e.g.</p> <p>32</p> <p>thirty two.</p>	<p>names:</p> <p>Two Little Cherries.</p> <p>Three Blind Mice</p> <p>Four little dumplings in a pot</p> <p>Five Little Ladies</p> <p>Ten Green Bottles.</p> <p>Spelling</p> <p>Spell the names of numerals e.g. 25 – twenty five.</p>

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION				
	SKILLS	KNOWLEDGE	ATTITUDE								
The value of each digit in a 2-digit numeral	Grouping objects. Classifying. Comparing Computing	State the value of each digit in a two digit numeral	Value oneself as a human person Value the items in the environment e.g. Trees, waterways, animals etc.	Value of each digit in a 2 – digit numeral up to 50. e.g.42 <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">Tens</td> <td style="padding: 5px;">Ones</td> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; padding: 5px;">4</td> <td style="text-align: center; padding: 5px;">2</td> </tr> </table> The value of 4 is 40	Tens	Ones	4	2	Group objects into sets of tens and ones e.g. below we have a set of 1 ten and 3 ones i.e 10 + 3 or 13. <div style="text-align: center; margin: 10px 0;"> <p style="font-size: small;">(xxxx) (x) (xxx) (x) (xxx) (x)</p> </div> <ul style="list-style-type: none"> - Show groups of tens and ones on a tally chart/abacus and using base ten blocks - Write the numerals for groupings shown on a tally chart/abacus. 	<ul style="list-style-type: none"> - Group objects into sets of tens and ones. - Write numerals for the number of objects in a set. - Complete these 1 ten + 1 one = <input type="text"/> - 16 = <input type="text"/> ten + <input type="text"/> ones. - State the value of a digit in 2-digit numerals. 	Rhymes Reciting rhymes dealing with tens and ones Music Chant numbers with rhythmic body movements Social Studies Investigate the value of items in a shop e.g. cost of a packet of crayons, a pencil etc. Health Education Care the body as a valuable part of self
Tens	Ones										
4	2										

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Counting, and writing numerals	Counting Matching number names with numerals Writing	Count from 1 to 100 Write numerals from 1 to 100	Enjoy achieving Strive to do one's best	Numerals from 1 to 100	- Count from 1 to 100 on a hundred grid - Count on from a given number to another given number (forward and backward) - Match number names with numerals	Complete sequences e.g. 2, 3, 4, __, __, __ 30, 31, __, __, __.	- <u>Science</u> : - Gather information by counting e.g. number of plants in the school garden -
Skip counting	Counting Computing Discussing	Skip counting in twos, threes, fours, fives and tens to one hundred.	Show interest in patterns In mathematics	Count in 2s, 3s, 4s, 5s, and 10s, up to 100 Show 1, 2, 3, 4, 5, or 10 more than and less than given numbers, not exceeding 100.	Skip counting in twos, threes, fours, fives and tens on a number line. (both forward and backwards) starting at any number .e.g. 55,56,57,58,... Increase/ decrease a given number by 1, 2, 3, 4, 5 or 10 and read and write the numeral.	Complete these sequences: (a) 10, __, 30, 40. (b) __, 60, 70, 80. (c) 90, 80, 70, __,	Physical Education Skip and chant in 2's, 3's, 4's, 5's, and 10's
Compare and ordering 1 and 2 –digit numerals	Counting Ordering Comparing Using symbols	Compare and order 1 - 2 digit numerals up to 99.	Show interest in activities	Compare and order 1 and 2 digit numerals up to 99	Use comparison symbols for greater than ($>$), less than ($<$), and equal to ($=$) to make true statements e.g. 24 > 18	Use comparison symbols to make true statements e.g. 18 < 20 Quiz Oral and written	Physical Education Order pupils according to heights for activities such as tug-o-war.

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
					<p>18 < 24</p> <p>18 = 18</p> <ul style="list-style-type: none"> - Order numeral cards from smallest to largest or largest to smallest and give reasons for answers. - Order pupils according to their numeral cards ,examples of which are shown below <p>202 46 70</p> <p>82 90</p>		
Odd and even numbers to 99	Grouping Counting Computing	Identify odd and even numbers to 99	Note differences and similarities in objects	Odd and even numbers to 99	Circle the even numbers in a set of numbers e.g	List odd and even numbers to 10 e.g. 2, 4, 6, 8, 10.	Physical – Education Play games



TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
					<p>2 3 10</p> <p>6 7</p> <p>5</p> <p>Circle the odd numbers in a set of numbers e.g</p> <p>13 17</p> <p>10 14</p> <p>15 16</p> <p>Put objects into two equal rows using even numbers first e.g. 6, 2, 4, 8, 10. Repeat using odd numbers. Make statements about what was observed. List all the sets that can be placed into two equal rows e.g. 2, 4, 6, 8, 10. Introduce the term "even". List all the sets that cannot be placed into two equal rows.</p>	<p>Complete sequence involving odd/even numbers e.g. (a) 3, 5, __, 9. (b) 2, __, 6, 8. Circle all even numbers in a set of numbers Give reason for answer. Circle all odd numbers in a set of numbers. Give reason for answers.</p>	<p>discarding odd or even number of scores e.g. throwing a die and not accepting 1, 3, and 5</p>

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
					<p>Introduce the term "odd".</p> <p>Skip count in twos from 0 to 10, for even number and from 1 to 10 for odd numbers.</p> <p>Identify sets with even number of objects and with odd number of objects</p>		
					<p>Repeat skip counting from 10 to 20 and name the numerals</p> <p>Recognise odd or even numbers by examining the last digit in each numeral</p>		
Ordinals	Identifying Ordering	Identify and use ordinals in ranking	Develop awareness of the need to work together	<p>Ordinal numbers to 31st.-</p> <p>(a) 1st to 9th</p> <p>(b) 10 th , 20th, 30th,</p> <p>(c) 11 th to</p>	<p>Arrange a set of number cards as shown to show one more than e.g.</p> <p><input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/> <input type="text" value="4"/></p>	Use the calendar to find the current month and name the days of the month as seen on a calendar	<p>Science</p> <p>Describe a process stating what is done first, second and so on.</p>



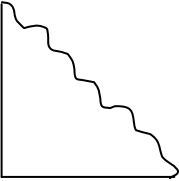
TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
				19 th (d) 21 st to 29 th (e) 30 th and 31st	Write these positions as shown e.g. first 1st second 2nd Demonstrate first, second, third, up to ninth using objects Arrange ordinal number cards into correct order Arranging number cards in order stating which is first, second, etc. e.g. 3 6 2 4 1 5 Use ordinals to identify positions of objects in an ordered set of objects.	Name the dates in the 1st week of the month/the last week of the month etc.	Music "On the first day of Mash, my true love sent to me one mango..."


GEOMETRY

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
GEOMETRY Solids	Sorting objects based on attributes.	Recognise solids in the environment	Appreciate the variety of objects in the	Solids – cube, cuboid, cone, cylinder, sphere.	Sort solids Give reasons for the sorting	Sort solids e.g. cube, cuboid, cone, cylinder, and	Science Group materials



TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
			environment			sphere.	according to appearances e.g. round objects, objects that can slide when pushed etc
Making models of solids	Manipulating based on attributes.	Use clay or dough to make defined solids	Display creativity	Make defined solids.	Combine solids to make representations of familiar objects e.g a ship, a house etc.	Use drinking straws to make and display models of solids	<u>Art:</u> Drawing solids. <u>Craft:</u> Making solids <u>Spelling:</u> Names of solids.
Attributes of common solids	Counting Sorting. Ordering.	Identify properties of solids	Complete tasks willingly	Properties of Solids.	Sort a given set of solids according to the number of edges and surfaces.	Identify the number of edges and surfaces in the cube, cuboid, cylinder and cone. Puzzles e.g. I am flat. I have six edges. What am I?	<u>Rhymes:</u> Compose and share rhymes based on solids <u>Art:</u> Draw solids and colour <u>Craft:</u> Make models of solids.
Plane shapes and their characteristics	Manipulating Tracing Naming Making patterns with shapes.	Recognise and name some plane shapes	Show interest in creative activities	Plane Shapes-. squares, rectangles, and circles	Trace the flat faces of the cube, cuboid and cylinder Name the shapes made Use rectangular geoboard to represent plane shapes.	Match plane shapes with their names.	<u>Craft:</u> Make and use Chinese tangrams to make 2-D representations of object.


TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
							Language Skills Spell and use names of plane shapes in sentences
Classifying plane shapes based on attributes	Identifying. Classifying	Identify plane shapes and classify plane shapes according to their edges and corners.	Enjoy learning through activities	Plane Shapes	<ul style="list-style-type: none"> - Identify plane shapes as seen in the faces of cubes, cuboids and cylinders. - Sort geometric cut-outs (circles, squares, rectangles, triangles) of various sizes according to the number of edges. - Discuss the meaning of corners. - Identify sides and corners of the squares with those of rectangles. Group shapes according to the number of sides and corners 	<p>Group shapes according to the number of sides</p> <p>Complete the following sentences: The square has – sides The rectangle has --sides The triangle has— sides The circle has -- sides</p>	<p><u>Art:</u> Drawing plane shapes.</p> <p><u>Craft:</u> Combine shapes to make patterns. Make mobiles using plane shapes</p> <p><u>Language Skills</u> Spell names of shapes</p> <p><u>.Physical Education</u> Play game where pupils hold hands to represent plane shapes.</p>
Congruent plane shapes	Folding papers Identifying.	Determine congruence of plane shapes by cutting and re-	Appreciate creative activities	Congruence of plane shapes – triangles, squares, circles	<p>Fold given plane shapes to make congruent ones .Fit cut-outs to form given plane shapes.</p>	Identify congruent plane shapes.	<u>Social Studies</u> – Use plane shapes to make pictures of

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
		combining.		etc.			buildings, places of worship etc <u>Craft:</u> Fix jig saw puzzles to form original shapes.
Symmetrical shapes	Identifying Observing	Construct and identify symmetrical shapes.	Appreciate symmetry in nature e.g. some leaves	Symmetrical shapes. Properties of symmetry. Mirror lines.	Fold given pieces of paper into two equal parts tearing around the free edges. 	Draw plane shapes showing lines of symmetry	<u>Art:</u> Drawing symmetrical shapes Mirror writing.
					Open paper and draw a line along the crease e.g.		

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
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					 <p>Discuss the results. Use mirrors to see the image of an object reflected. Use carbon paper to draw objects and observe its mirror image.</p>		
Lines and line segments	Drawing line segments Identifying line segments	Identify representations of lines and line segments.	Appreciate the work of others	The concept of a line and line segment..	Discuss the concept of a line by joining points and using arrowheads Discuss the concept of a line segment by using pieces of string etc Fold paper to form line segments in different positions.	Draw line segments in different positions – vertical, horizontal, oblique.	Art Joining dot to dot to form outlines of objects in the environment

FRACTIONS

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
FRACTIONS Halves and quarters of wholes	Dividing wholes into equal parts Identifying the number of equal parts	Name equal parts of wholes e.g one half and one quarter Recognise the numerals for one half and one quarter	Develop willingness to ask questions Appreciate the use of fractions in everyday life	Fractions – halves and quarters of wholes. Fraction – halves and quarters of a set of objects. Comparison of fraction using the symbols	Fold geometric cut outs into two equal parts. Name each equal part one half Repeat for four equal parts naming each equal part one quarter Write numerals for one half and one	Identifying halves and quarters of wholes. On the diagrams, shade to show the fractions given  $\frac{1}{2}$  $\frac{1}{4}$	Art and Craft Drawing, shading making collage of shapes Language Arts Spelling: Whole, wholes One half, two halves One quarter, two

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
				<p>is less than < is greater than > is equal to =</p>	<p>quarter Show one half and one quarter on the fraction chart Discuss representations of fractions on the fraction chart. Share one half of a set of even numbers of objects and write number sentences e.g. $\frac{1}{2}$ of 8 = 4 $\frac{1}{2}$ of 12 = 6</p> <p>Fold strip of paper to show halves and quarters</p> <p>Discuss show many halves and quarters make a whole. Use the comparison symbols to make statements: e.g $\frac{1}{2} > \frac{1}{4}$ $\frac{1}{4} < \frac{1}{2}$</p>	<p>and one quarter of sets with even numbers of objects. Use the fraction chart (shown below) to make number sentences e.g. $1 > \frac{1}{2}$ $\frac{2}{4} = \frac{1}{2}$</p> <p style="text-align: center;">1</p> <p style="text-align: center;">$\frac{1}{2}$ $\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$</p>	quarters
Thirds, fifths, sixths, eighths, and ninths of wholes	Folding paper/strips of cardboard Naming Writing	Identify thirds, fifths, sixths, eighths, and ninths of wholes by folding ,	Develop willingness to use material for investigation	Fractions $\frac{1}{3}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$ and $\frac{1}{9}$	Fold strips of cardboard to show thirds/fifths/sixths/eighths/ninths of a whole and name	What fractions of the diagrams are shaded?  —	Language Skills Spelling One third



TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Fraction of a set of objects	Shading	shading and labelling			each part correctly. Shade fractional parts.	<p style="text-align: center;">_____</p> <p style="text-align: center;">Shade to show the fractions given</p> <p style="text-align: center;">$\frac{2}{3}$</p> <p style="text-align: center;">$\frac{2}{6}$</p>	One half One sixth One eighth One ninth
	Making sets Counting Computing Verifying	Make sets using objects	Enjoy exploring mathematics.	Fraction of a set	Find $\frac{1}{3}$ of a set of given objects, the number of objects being multiples of three e.g. 6, 9, 12, 15 Repeat method for $\frac{1}{5}$ of a set where the number of objects in the set is a multiple of five e.g 5, 10, 15, 20 etc.	Select $\frac{1}{3}$ and $\frac{1}{5}$ of a set of objects Complete number sentences e.g. $\frac{1}{3}$ of 9 = = $\frac{1}{5}$ of 20	

MEASUREMENT- LENGTH

TOPIC	OBJECTIVES			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
LENGTH	Observing Measuring using non-standard	Estimate, measure and compare lengths	Share and co-operate with group members.	Some objects have more units of	Estimate and measure objects using non –	Compare hand-spans and foot prints to select	Language Skills Comparison of

TOPIC	OBJECTIVES			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION				
	SKILLS	KNOWLEDGE	ATTITUDE								
	units Estimating Verifying	using non – standard units		length/height than others	standard units e.g. hand spans; foot prints	long and longer ones	Adjectives e.g. long –longer tall - taller <u>Art</u> Print hand spans and foot prints Colour prints				
The metre as a unit of length	Measuring using standard units Estimating lengths of objects Comparing length of objects.	Identify a metre rule. Express lengths of objects to the nearest metre.	Show willingness to participate in measuring activities	Some lengths are longer than a metre and some are less than a metre. Lengths that are close to a metre can be written to the nearest metre. The abbreviation for metre is (m).	Estimate lengths of objects. Measure objects using a metre rule. Compare length of objects to the nearest metre e. g the desk is longer than one metre while an exercise book is shorter	Compare objects under the following headings. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Longer than</td> <td style="padding: 2px;">Shorter than</td> </tr> <tr> <td style="padding: 2px;">A metre</td> <td style="padding: 2px;">A metre</td> </tr> </table> Compare lengths of objects e.g desk, chalkboard, door, window etc	Longer than	Shorter than	A metre	A metre	<u>Science</u> – Estimate and then measure heights <u>Art</u> – Draw persons to show differences in heights.
Longer than	Shorter than										
A metre	A metre										
Relationship between a half of a metre and 50 centimetres	Making metre strips Folding strips Comparing	Recognise the relationship between a half of a metre and 50	Aim at accuracy in folding strips in halves.	A half of a metre is equal to 50 centimetres	Make strips of cardboard in metre lengths. Fold strips of	Fold metre strips to show half of a metre. Mark 50	<u>Art and Craft</u> Make metre strips and half metre strips				

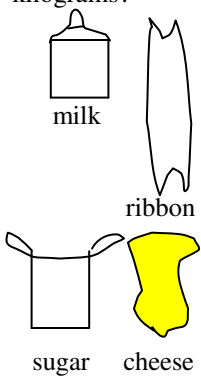
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	SKILLS	KNOWLEDGE	ATTITUDE				
	Analysing	centimetres.			cardboard in halves. Place the half metre strip against the metre ruler and state the number of centimetres in half of a metre.	centimetres on the metre strips. Complete sentences:- (1) One metre has --- centimetres. (2) One half of a metre is the same as – centimetres.	Science Operation environment Undertake a project to measure and record lengths and heights of objects in the environment


MEASUREMENT - CAPACITY

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Capacity of containers	Estimating and measuring capacity Ordering containers according to capacity.	Recognise the capacity of a container as how much it can hold.	Co-operate with others in measuring capacity.	Some containers have a larger capacity than others.	Use a fixed measure, to estimate then measure the capacity of given containers. Arrange given containers in ascending and descending order according to their capacity.	Use a cup to find the amount of water in a given bottle. Arrange four containers in order of capacity:	Health Education Read labels of containers to avoid using contents dangerous to health. <u>Science</u> Note natural c containers e.g. lakes, ponds, trenches, canals, rivers, sand pits etc.

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
							Role Play Act as a seller of milk, oil, etc. using suitable containers for measuring and receiving
The relationship between the litre and the half litre	Measuring using standard units Estimating capacity Comparing capacity of containers.	The litre is made up of 2 half litres -		Litre is the standard unit for measuring capacity. The abbreviation for litre is (ℓ). 1 litre is equal to 2 half litres.	Examine containers with capacity of 1 litre e.g. some soda bottles Examine containers with content of 1 litre Estimate the capacity of containers in litres. - Measure the capacity of some containers in litres e.g. milk tins, sodas bottles, small buckets. - Record measures using the abbreviation for litre. Compare the capacity of ½ litre container and the litre container. - Use a half litre measure to fill given litre containers.	Use a 1 litre measuring cup to find the capacity in litres of a given container. Complete using comparison symbols: , is greater than > is less than < is equal to = ½ ℓ 1 ℓ ½ ℓ ½ℓ 1 ℓ ½ℓ ½ℓ + ½ ℓ 1ℓ ½ℓ + ½(ℓ) ½ℓ	<u>Language Skills</u> Write sentences e.g. I can drink _____ℓ of liquid for a day. This bottle has a capacity of ----ℓ <u>Social Studies</u> Collect and display packets, labels etc showing capacity in litres and half litres.

MEASUREMENT- MASS

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Mass. Non-standard units	Measuring and estimating mass. Comparing. Ordering	Use non-standard units of mass Recognise that the amount of matter of an object is its mass	Appreciate that non-standard units can be used to measure mass	Measure mass using non- standard units.	<ul style="list-style-type: none"> - Measure and estimate mass using non-standard units e.g handfuls, bowlfuls, cupfuls etc. - Compare various masses. - Arranging the objects in order of mass – heaviest to lightest and vice versa and discuss these arrangements. 	Estimate, measure and compare mass using non- standard units. Arrange the objects in order of mass.	<u>Science</u> Collect three heavy and three light materials and display same in the science corner arranged from heaviest to lightest.
The kilograms	Measuring using standard units Listing Using abbreviations for standard units	Recognise the kilogram as the standard unit for measuring mass.	Accept the need for standard units in measuring	The kilogram as the standard unit for measuring mass	<ul style="list-style-type: none"> - Discuss the need for standard units of measure for measuring mass - List commodities that are measured in kilograms - Collect empty food packets with contents stated in kilograms on them 	Which of the following can be measured in kilograms? 	<u>Language</u> <u>Skills</u> Display and label food items that are bought in kilograms e.g flour, sugar, eddoes etc

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
						 oil	
Measuring mass in kilograms	Estimating and measuring mass. Approximating Recording Using abbreviations	The abbreviation for kilogram is kg	Appreciate the need for measurement	The kilogram as a unit of mass	Handle plastic bags of pre-weighed masses of 1 kilogram e.g. sand, pebbles, seeds. Estimate and measure given masses in kilograms giving answers to the nearest kilogram. <ul style="list-style-type: none"> - Compare the estimated measure and the actual measure. - Record the masses of these objects using the abbreviation, kg. - Arrange objects measured in kilograms in order of mass – heaviest to lightest and vice versa and discussing the arrangements. 	Collect empty containers packets of items measured in kilograms e.g. cake boxes, curry power packets. Sort containers and packets according to their masses.	Social Studies Use a shop corner to simulate buying and selling items measured in kilograms Science Estimate mass of pupils in the class Use a bathroom scale to find out the actual mass of pupils Select the lightest person in the class and the heaviest.

MEASUREMENT- TIME

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
TIME	Reading and	Read time on the	Cooperate and	Time on the	Read time on the hour,	Show and tell time	Games

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION																
	SKILLS	KNOWLEDGE	ATTITUDE																				
The 24-hour clock	writing time Discussing Demonstrating position of hands of the clock.	hour, ½ hour and ¼hour. Recognise the position of the hour hand in relation to the minute hand when the time is shown on the hour , the ½ hour and the ¼ hour.	work together in various activities.	hour, ½ hour, and ¼ hour – using a 24-hour clock. -	½ hour and ¼ hour. e.g. 09:00 hours read as nine hours - 09:30 hours read as nine hours thirty 10:15 hours read as ten hours fifteen). - Demonstrate the position of hands of the clock on the hour; ½ hour; ¼ hour. - Write the notation - e.g. 10: 30 hours	using a real clock or the model of a clock Quiz	Neighbour, neighbour, what’s the time? Music Rhythmic movements Songs related to time e.g Hear Auntie Bess Craft Make models of clock faces																
	Reading time. Discussing	Tell time that has elapsed between intervals of hours and ½ hours.		Time Intervals – hours and ½ hours.	Showing one hour after or before given times. - Showing ½ hour after or before given times. - Making up word problems involving hour and ½ hour intervals.	Constructing a Chart on time e.g. <table border="1" data-bbox="1507 803 1753 1026"> <thead> <tr> <th>Time</th> <th>½ hour early</th> </tr> </thead> <tbody> <tr> <td>09:00h</td> <td>08:30h</td> </tr> <tr> <td>12:00h</td> <td>—</td> </tr> <tr> <td>14:30h</td> <td>—</td> </tr> <tr> <td>18:00h</td> <td>—</td> </tr> <tr> <td>20:30h</td> <td>20:00h</td> </tr> <tr> <td>21:00h</td> <td>20:30h</td> </tr> <tr> <td>23:30h</td> <td>—</td> </tr> </tbody> </table>	Time	½ hour early	09:00h	08:30h	12:00h	—	14:30h	—	18:00h	—	20:30h	20:00h	21:00h	20:30h	23:30h	—	Physical Education Time activities e.g. start at 08:30 hours end at 09:00 hours Language Arts Make up duty list stating time for activity using 4 digits notation
Time	½ hour early																						
09:00h	08:30h																						
12:00h	—																						
14:30h	—																						
18:00h	—																						
20:30h	20:00h																						
21:00h	20:30h																						
23:30h	—																						
Days, weeks, months, years	Reading the calendar Discussing	State the number of days in a week,; weeks in a month; months in a year. Read the calendar and tell	Share materials and co-operate to read calendar.	- 7 days in a week Approximately 4 weeks in a month - 12 Months in a year - Time-	Use calendar to count the number of days in a week, weeks in a month; months in a year. - State the number of days in a week,	Complete: One week has ____ days. One month has approximately____ weeks. One year has ____	Poetry: Rhymes e.g. Solomon Grundy Current Affairs																

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
		time that has elapsed between days and month		Interval – days and months.	<p>approximate weeks in a month; and months in a year.</p> <p>- Telling time that has elapsed between days and months.</p>	months.	<p>Share news on birthday celebrations</p> <p>Music Composing songs on days of the week, months of the year.</p> <p>Games Calendar Capers</p>

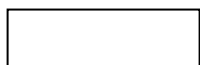
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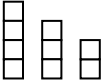
TOPIC	OBJECTIVES			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Money Properties of coins and notes	<p>Grouping coins</p> <p>Observing</p> <p>Recording</p> <p>Discussing</p> <p>Ordering coins according to values</p> <p>Matching</p> <p>Drawing</p>	Discover that different coins have different value, size, shape, edge, colour, mass and texture.	Appreciate money as important for a comfortable life	The value of local currency up to twenty dollars	<p>- Discuss a set of real coins in terms of size, colour, edge, value, texture, mass etc.</p> <p>- Discuss a real note (\$20) in terms of size, colour, value, texture, mass etc.</p> <p>- Order coins and note according to values –</p>	<p>Matching coins to a given quantity (e.g)</p> <p>($\\$1$) ($\\1) ($\\$1$)</p> <p>($\\1) ($\\$1$) =</p> <p>5 dollars</p>	<p><u>Art</u>: Printing and drawing coins.</p> <p>Story telling Stories related to money</p> <p>Health Education Health rules governing the use of money e.g. do not place coins in mouth, wash hands after handling money</p>

TOPIC	OBJECTIVES			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
					highest to lowest and vice versa.		etc. Social Studies How money is used wisely e,g reaching needs of families and communities, preserving the environment etc.
Relationship between the values of coins and notes	Grouping coins. Counting Purchasing	Recognise equivalent values of coins and note up to twenty dollars	Work together. Share ideas.	Money-equivalent values.	- Counting in 5's, 10's using coins. - Match coins/notes with their equivalent values in coins and notes	Complete sentences e.g. $\$1 + \$1 =$ $\$5 + \$5 =$ $\$10 + = \20	<u>Art.</u> Printing coins <u>Social Studies:</u> Play at shop to purchase same items using combination of different coins to reach the sale price

GRAPHS

TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
	Constructing	Constructing	Work together in	Graphs –	Collect and display	Read and interpret	<u>Health Education.</u>



TOPIC	OBJECTIVE			CONTENT	METHODS/ STRATEGIES-	EVALUATION	AREAS OF INTEGRATION
	SKILLS	KNOWLEDGE	ATTITUDE				
Pictographs	simple pictographs Collecting data Displaying information	simple pictographs e.g. X X X X X X X X X X	groups.	pictograph	two different types of fruits that pupils like using horizontal representation .	information on the graph.	The importance of fruits
Reading information from pictographs. Constructing simple block – graphs.	Reading interpreting	Read information from pictographs	Assist one another in completing tasks		Read and interpret data on simple pictograph. Repeat using the vertical representation. Do activities using various materials.	Read and interpret information on given pictograph.	<u>Art and Craft.</u> Make and use templates to draw graphs.
Block Graphs.	Constructing block graphs Collecting data Displaying information	Construct simple block – graph e.g. 	Appreciate cooperative learning	Block Graph	Collect and display data on block – graph using vertical representation		
Reading information from block graphs.	Interpreting information.	Reading information from block – graphs	Recognise the value of information in making decisions		Read and interpret information on block – graph. Repeat using horizontal representation Vary activities using other materials	Read and interpret information on block – graphs.	