



FIRST TERM

MATHEMATICS

PRIMARY 1 (6 YEARS)

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	<u>Whole numbers:</u> Identification and reading of number of object 1-5	Pupils should be able to:- (i)- identify number of objects 1-5 (ii)- Read number of objects 1-5	Counters: beans, bottle, tops, buttons and stone
2	Sorting and classification of object on numbers 1-5	Pupils should be able to: (i)- Sort out different objects into groups of similar objects. (ii)-classify different objects e.g books, pencils, sticks, seeds, bottle tops.	Number cards, leaves, nylon bags, stones, bottle tops, buttons, number chat
3	Ordering and writing of numbers 1-5 and 5-1	Pupils should be able to: (i)- arrange the numbers in order of their magnitude and vice-versa (ii)-write the numbers orderly in their books	Counters: Seeds, bottles covers, paper bags and other containers
4	Introducing zero (0) as a number.	Pupils should be able to: (i) - recognise the symbol 0 (ii)- Identify set or group of 5 numbers. (iii)- Reduce by one until all numbers disappear. (iv)- make correct statement about zero as no-number or empty	Stones, Paper bags, Bottles Song on 5 green bottles standing on the wall.



5	Identification and reading of number 6-9 and 9-6	Pupils should be able to: (i) - Identify numbers 6-9 (ii)- Read numbers 6-9 and 9-6 (iii)- Sort out numbers 6-9 from group or set (iv)- Arrange numbers 6-9 in order of magnitude.	Flash cards, balls peoples, buttons, stones, Pebbles, sticks of matches.
6	Whole number 10	Pupils should be able to: (i) - Recognise 10 as a group (ii)-Identify 10 as Tens and 1-9 as Units	Counters: bottle top, button, balls, fingers and toes.
7	Counting and reading and Writing of numbers. (i) 11-20 (ii) 21-50	Pupils should be able to: (i)- Identify numbers 11-20 (ii)- count and read numbers 11-20 (iii)- Relate the counting and writing of 1-9 with 11-20 (iv) - Count and write numbers with 21-50 and 50-21	Flash cards of numbers, number chat
8	Counting, Reading and writing of numbers 51-100	Pupils should be able to: (i)- Count and Read numbers 51- 80 (ii)-Write at least numbers 51- 80 Read and Write numbers 51-100 and 100-51	Flash card of numbers, number chart
9	<u>Fractions</u> Identification of fractions ($\frac{1}{2}$ and $\frac{1}{4}$) with the use of concrete objects and shape.	Pupils should be able to: (i) - Identify fraction as numbers (ii)- Divide an object e.g Orange into two equal parts Identify half, one quarter of an object. i.e (half or quarter)	Oranges, apples, Paper cutting of shapes: - squares - rectangle - circle.



10	Matching of fraction with concrete objects	Pupils should be able to: (i) - Recognise fraction of $\frac{1}{2}$ (ii) - Recognise fraction of $\frac{1}{4}$ (iii) - Match fraction $\frac{1}{2}$ and $\frac{1}{4}$ with correct divided object	- Card board cuts into $\frac{1}{2}$ and $\frac{1}{4}$, - Charts contain diagrams on fractions.
11	Objects and shapes	Pupils should be able to: (i) - identify objects in the environment. (ii) - classify objects into different shape such as circle, triangle, square, rectangle, kite.	- Apples, Oranges, Paper, Pizza, Cake, Matches box, Sugar cubes, Kite, - Charts on Shape..
12	Revision of the term's work	REVISION	
13	Examination and collation of Assessment	EXAMINATION	



MATHS

PRIMARY 1 6 YEARS

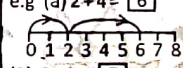
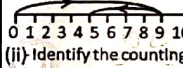
SECOND TERM

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision of first terms work.	Pupils should be able to: (i) - recall what has been taught and write them correctly. (ii) - Counting and writing of number 1-50 and 50-1, 51-100 and 100-51	- Charts containing number reading from 1-50 - 100 square Chart
2	Addition of whole numbers with sum less than 5.	Pupils should be able to: - add two whole numbers from 1 to 3 with sum less than 5. e.g $1+1=2$, $2+1=3$ - Recognise the symbol "+" and say what it means and what it stands for.	Oranges, balls, leaves, bottle tops, big beads button etc
3	Addition of whole numbers with sum less than 10	Pupils should be able to: (i) - add any two or three numbers from 0 to 9 with the aid of objects for counting (ii) - Add two or three whole numbers from 1 to 8 with sum less than 10.	Oranges, bottle tops, big beads, stones, pegs etc.
4	Addition of whole numbers with sum less than 20	Pupils should be able to: (i) - Add any two or three numbers with sum from 11 to 19. (ii) - Use the various ways of forming 3, 6 and 9 to solve addition of sums	Oranges, bottle tops, beads, stones, pegs etc



		mentally. (iii)- Solve addition in vertical order	
5	Addition of items of 2-digit whole numbers with sum not greater than 40	Pupils should be able to: (i) - add 2-digit whole numbers with sum not greater than 40 (ii)- Combine two groups of 2-digit numbers less than 40 and count the total.	Beads, Bottle tops etc.
6	Subtraction. Subtraction of whole numbers not greater than 9	Pupils should be able to: (i)- Subtract from whole numbers not greater 9 e.g 5-3, 4-1, 7-4, etc. (ii)- play games involving addition	Stones, beans, beads oranges, ludo game for illustration.
7	Subtraction of whole number not greater than 20	Pupils should be able to: (i)- Subtract from whole numbers not greater than 20. (ii)- Play games involving subtraction	Stones, beans, beads, oranges etc.
8	Subtraction involving addition.	Pupils should be able to: (i) - find the missing addends e.g (a) $8 + \square = 10$ (b) $\square + 7 = 12$ (c) $\square - 3 = 5$	Bottle tops, Number cards
9	Open Sentences involving subtraction	Pupils should be able to: (i)- find the missing addends e.g (a) $8 - 3 = \square$ (b) $6 - \square = 4$ (c) $7 - 0 = \square$	- Number cards - Dots cards - The Pupils for life practical illustration.



10	Addition of two-digit numbers without regrouping.	Pupils should be able to (i)-add two-digit numbers without grouping e.g (a) $40 + 9 = \boxed{49}$ (b) $97 = 90 + \square$ (c) $58 = 50 + \square$	- Dot cards - Number cards - Bottle tops. - The Pupils
11	Addition and subtraction on number line.	Pupils should be able to (i) Add using number line e.g (a) $2 + 4 = \boxed{6}$  (2) $9 - 4 = \boxed{5}$  (ii) Identify the counting numbers forward and of backward using the arrows. e.g forward (\rightarrow) = (addition) backward (\leftarrow) = (subtraction)	- Dot cards - Number cards - Bottle tops - Pupils themselves
12	Revision of term's work.	Revision of term's work	
13	Examination and collation of assessment	Examination	



MATHS

PRIMARY 1 (6 YEARS)

THIRD TERM

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision of second term's work.	Pupils should be able to: (i) - Recall what has been taught and write them correctly. (ii) - Counting and writing of numbers 51 - 100	Chart Containing numbers 51- 100
2	Money: Recognition of coins and notes	Pupils should be able to: (i) - Recognise different denominations of Nigerian currencies e.g. ₦1 coin, 1k, 5k, 10k, 25k, 50k (ii) - Arrange coins in order of their values. (iii) - Express one coin in terms of another (in value) (iv) - Differentiate between coins and notes. i.e. ₦5, ₦10, ₦20, ₦50, ₦100, ₦200, ₦500, ₦1000 notes.	- Real coins - Model coins or traced coins - Real notes - Model notes or traced notes - Brown paper - White paper
3	Money - (Contd) Addition and subtraction of coins and notes.	Pupils should be able to: (i) - Add and subtract Nigerian coins with different values not exceeding 25kobo e.g. (a) $5k + 1k = 6k$ (b) $4k + 5k = 9k$ (c) $10k - 5k = 5k$. (ii) - Add and subtract notes involving ₦10 up to ₦50 (iii) - Buy, sell and calculate the balance from ₦10 to ₦50. e.g. $₦40 - ₦10 = ₦30$.	- Flash cards - Chart contains buying and selling transaction



4	Length: introduction	Pupils should be able to: (i) - Define Length (ii) - Estimate length and given distances with natural Unit. (iii) - Measure length with natural units such as distance between the feet, fingers, hand span (iv) - Compare the length of two or three common objects in their classroom e.g. desk top and white board.	- Pencil - Stick - Door - String - Pupils themselves - Classroom - etc.
5	Ordering of measurement	Pupils should be able to: (i) - Explain the need for a standard unit of measurement. e.g. mm, cm, dm, m, km. (ii) - Compare the length of different objects with the use of terms "longer than" and "shorter than".	- Pencil - Stick - Desk - Ruler - String - Tape. etc
6	Weight	Pupils should be able to: (i) - Explain the term 'weight' (ii) - Compare the weight of some common objects in the school using the terms 'light' and 'heavy'. or 'heavier than' or 'lighter than'.	- Weigh balance - See-Saw - Scale - Stone - Paper - Weighing Scale
7	Time	Pupils should be able to: (i) - Identify the Wrist watch and wall-clock.	Charts indicating activities Peculiar to different period of the day. - Wrist watch



		(ii) - Time and when the events take place. e.g - Morning - Afternoon - Evening - Night (iii) - Explain the need to keep to time	- Wall clock - School bell - Cocks crowing at dawn - Direction of shadow casting
8	Capacity: 3 - dimensional shapes.	Pupils should be able to: (i) - Mention the objects that belong to 3-dimensional shape (ii) - Identify cubes, Cuboids, cylinder and sphere. (iii) - Compare the capacity of containers. (iv) - Mention capacity of containers used at home.	- Sugar Cubes - Maggi cubes - Choco milo - Tins of Milk - Matches box - Round tray - Charts of solid shapes
9	Two dimensional shapes.	Pupils should be able to: (i) - Identify shapes with two dimensions. e.g (a) Square (b) Rectangle (c) Circle. (ii) - Match and name them - Distinguish between Rectangular and Circular home utensils / appliances having these shapes.	- Pot - Television - Dinning table picture - Charts of Cooking utensils
10	Data collection	Pupils should be able to: (i) - Collect data on Children's ages at home and school. (ii) - Collate their age	- The pupils - Cards written ages. - Board ruler etc.



		group (mates) with their heights. (iii) - Group children base on their complexion. (iv) - Group and collate children's sex (gender).	
11	Practical work	Pupils should gather sticks of matches, or small sticks, thread or rubber band. Sticks or match sticks should be grouped in tens and bounded. The left over are then counted as units	- Matches - Small sticks - Rubber band or - Thread
12	Revision of term's work	Pupils should be able to: - recall what they have learnt during the term and solve some exercises.	
13	Examination and collation of assessment	EXAMINATION	



MATHEMATICS

PRIMARY 2 (7 YEARS)

FIRST TERM

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision counting and writing numerals 1 to 100	Pupils should be able to: (i) - Count up to 99 (ii) - Write numerals up to 99 Recognise the numerals up to 99.	Charts Showing numerals 1-99
2	Whole Numbers: Identification and - Counting of numbers from 101-200	Pupils should be able to: (i) - Identify and read numbers from 1- 200 (ii) - Count number up to 200 (iii) - Identify orders of numbers 101-200 and 200-101 (iv) - Read and write number 101 - 200	Concrete objects such as bottle tops, sticks, seeds, bags of bundle of seeds, straws, flash card, two hundred square charts, ropes etc.
3	Reading counting and writing numbers from 1-200	Pupils should be able to: (i) - Recognise the numerals up to 200 (ii) - Read and write numerals from 1 -200	Sticks, seeds, water proof, bags of bundles of seeds, straws, flash cards, two hundred square charts etc.
4	Introduction of place value of numbers up to 200	Pupils should be able to: (i) - Identify the place value of number up to 200. (ii) - Write the place value of numbers up to 200	- Bundles of seeds, Two hundred square charts. - Bundles of match sticks.
5	Ordering of numbers up to 200	Pupils should be able to: (i) - Write up to 200 in order of their value. (ii) - Read up to 200 in order of their value.	- Bundle of seeds - Two hundred square charts.



6	The use of symbols $>$, $<$ and $=$ to determine the value of numbers for 0-200	Pupils should be able to: (i) - Interpret the meaning of $>$, $<$ and $=$ as (a) $>$ greater than (b) $<$ less than (c) $=$ Equal to (ii) - Use the symbols of inequalities to determine the value of numbers. e.g (a) $5 > 2$ (b) $150 < 185$ (c) $125 = 100 + 25$	- Number line chart - Card board strip with numerals. - Left and Right hands folding demonstration.
7	Fraction: fraction $\frac{1}{2}$ and $\frac{1}{4}$ of a given collection	Pupils should be able to: (i) - divide a collection of concrete objects into two or into four equal parts. i.e half ($\frac{1}{2}$) and quarter ($\frac{1}{4}$) respectively. e.g. (a) $\frac{1}{2}$ of 8 eggs = <input type="text"/> (b) $\frac{1}{2}$ of 10 oranges = <input type="text"/> (c) $\frac{1}{4}$ of 12 pencils = <input type="text"/> (d) $\frac{1}{4}$ of 16 balls = <input type="text"/>	- Oranges - eggs - pencils - balls etc
8	Fraction of $\frac{3}{4}$ of any given object or collection	Pupils should be able to: (i) - Divide the objects into four equal parts to obtain quarters. (ii) - Obtain $\frac{3}{4}$ of concrete object e.g $\frac{3}{4}$ of 8 eggs = <input type="text"/>	- Cardboard - eggs - oranges etc.
9	Addition of numbers. (2-digit numbers without remaining or exchanging	Pupils should be able to: (i) - Add 2-digit numbers without exchanging or remaining	Counters such as beads, sticks, bottle top, straws, Stones, pegs etc.



		e.g. $64 = 60 + 4$ $\begin{array}{r} +13 \\ 77 \end{array} \quad \begin{array}{r} 10+3 \\ 70+7 \end{array}$	
10	Subtraction of 2-digit numbers without remaining or exchanging.	Pupils should be able to: (i) - Subtract 2-digit numbers without remaining or exchanging e.g. $87 = 80 + 7$ $\begin{array}{r} -52 \\ 35 \end{array} = \begin{array}{r} -50+2 \\ 30+5 \end{array}$	- Number card - cardboard strips with numerals and number line
11	Mixed operations (Addition and subtraction).	Pupils should be able to: (i) - Add up numbers from 0-200 (ii) - Subtract numbers from 0-200 (iii) - Solve problems using Tens and Unit indication. e.g. $\begin{array}{r} H T U \\ 141 \\ +025 \\ \hline 166 \end{array} \quad \begin{array}{r} H T U \\ 145 \\ -013 \\ \hline 132 \end{array}$	Beads, sticks, oranges, beans, seeds, bottle tops.
12	Revision of term's work.	Pupils should be able to: - Recall what they have learnt for the term.	
13	Examination	Examination.	



MATHEMATICS

SECOND TERM

PRIMARY 2 (7 YEARS)

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision of first term work.	Pupils should be able to: (i) - Revise the first term's lesson. (ii) - Practice more exercises on counting and identification of numbers.	Number chart - Inequalities lines chart - Cardboard strips with numerals. - Oranges.
2	Addition of 2-digit numbers without exchange or remaining	Pupils should be able to: (i) - Add two-digit numbers with exchanging or remaining. e.g. $70 + 6 = 76$ $10 + 9 = 19$ $80 + 15 = 95$ But $15 = 10 + 5$ $80 + 15 = 80 + 10 + 5 = 95$	Beans, seeds, beads, sticks, top bottles etc.
3	Subtraction of 2-digit numbers with exchanging or remaining.	Pupils should be able to: (i) - Subtract 2-digit numbers with exchanging or remaining e.g. $54 = 50 + 4$ $\begin{array}{r} -47 \\ 40+7- \\ \hline 7 \end{array}$ Since 4 is less than 7 in their column, then it becomes $40 + 14$ $\begin{array}{r} -40 + 7- \\ \hline 0 + 7 \end{array}$	Counters like: Beans, seeds, beads, sticks top bottle etc.



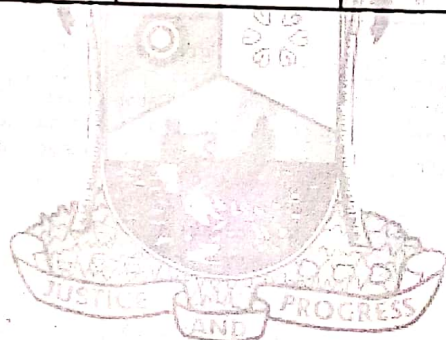
4	Addition of 3-digit numbers without remaining or exchanging	Pupils should be able to: - Add 3-digit numbers Without remaining or exchanging. $\begin{array}{r} 1\ 3\ 4 \\ 1\ 2\ 5 \\ 2\ 5\ 9 \end{array} \quad \begin{array}{r} 100+30+4 \\ 100+20+5 \\ 200+50+9 \end{array}$	Counters like: Beads, seeds, beans, sticks top bottle etc.
5	Subtraction of 3-digit numbers without remaining or exchanging.	Pupils should be able to: (i)- Subtract 3-digit numbers without remaining or exchanging e.g $4\ 4\ 8 = 400+40+8$ $\begin{array}{r} -2\ 3\ 5 \\ 2\ 1\ 3 \end{array} \quad \begin{array}{r} -200+30+5 \\ 200+10+3 \end{array}$	Counters like: Beads, seeds bottle tops, beans, sticks etc.
6	Odd and even numbers from 1-100, 11-20 and 21-50	Pupils should be able to: (i) - Define odd and even number (ii)- Identify odd and even numbers by building in two rows. i.e $\begin{array}{cc} 1 & 2 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 & 10 \end{array}$ Odd Even (iii) - Establish that the sum of two odd numbers is even e.g (1) $1 + 3 = 4$ i.e odd + odd = Even (2) $5 + 7 = 12$ (3) $7 + 9 = 16$ etc.	Chart containing rows of odd and even numbers.
7	Open sentences - Involving addition	Pupils should be able to (i)- Find missing numbers	- Pupils - bottle tops



	and subtraction.	in an open sentence; (i) - Solve simple quantitative aptitude problems.	- number cards
8	Multiplication: By using repeated addition (Additive Multiplication)	Pupils should be able to: (i) - Multiply numbers using repeated addition e.g $2 + 2 + 2 = 6$ $4 + 4 = 8$ (ii) - apply correct symbol for multiplication as "X" i.e $2 + 2 + 2 = 2 \times 3 = 6$ $00+00+00 = 00000 = 6$ $4 + 4 = 4 \times 2 = 8$ $0000 + 0000 = 0000\ 0000 = 8$	- Number cards - Cardboard with numerals and number line Chart. - Multiplication table Chart.
9	Multiplication of 2-digit numbers by 2 or 3 without remaining or exchanging	Pupils should be able to: - Use counters to carry out multiplication as repeated addition. - Apply the value of multiplication in everyday activities. - Give examples of daily activities where multiplication is necessary. e.g 1 dozen of books = 12 books then 3 dozen of books = $3 \times 12 = 36$ books Or $\begin{array}{r} 1\ 2 \\ \times\ 3 \\ \hline 3\ 6 \end{array}$	- Number cards - Beads - sticks - counters such as beans, oranges seeds, bottle tops.
10	Practical work	Pupils to gather sticks of matches and count in Bundles of 10, 12, 20 to learn	- Sticks - counters as top bottles, beads etc.



		* Tens * Dozen = 12 * Score = 20	
11	Revision of term's work	Teacher revises second term's work and allow pupils to ask questions on difficult area	
12	Examination	Examination	
13	Examination	Examination	



MATHEMATICS

THIRD TERM

PRIMARY 2 (7 YEARS)

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision of second terms work.	Pupils should be able to: (i) - recapitulate the first and second term's lesson. (ii) - Practice more exercises on addition, subtraction and multiplication of numbers.	- Bottle tops - Number Cards - Sticks.
2	Money. - Uses of money - Nigerian coins and notes - Units of money	Pupils should be able to: (i) - enumerate the uses of money and unit of money (ii) - Recognise all types of Nigerian coins and bank notes. (iii) - Change and mention the units of money i.e (a) from kobo to naira (b) from naira to kobo (iv) - Indicate the symbol of money for Nigeria appropriately. i.e kobo = k Naira = N	- Nigerian coins and bank notes - Chart of coins and bank notes - Various articles with price tag.
3	Time: Clock: hour, minute and second hands.	Pupils should be able to: (i) - Identify hour, minute and second hands. (ii) - Mention importance of time (iii) - Read and tell an hour and half hour e.g 3 o'clock, half past 2.	- Real clock. - Cardboard clock - Dummy clock - Clock Chart
4	Time: Days of the week.	Pupils should be able to:	- Calendars



		(i) - Name and arrange days of the week. (ii) - List certain activities performed on certain days of the week. e.g (iii) - Going to school from Monday - Friday. (iv) - Muslim goes to mosque on Friday. (v) - Christian goes to church on Sunday etc.	- Table of days of the week. - Diary - Song and rhymes on days of the week.
5	Length: - Natural Units of groups of lengths. - Measurement in metres and centimetres.	Pupils should be able to: (i) - Define length (ii) - Compare the standard unit and natural unit of measurement. (iii) - Use metres and centimetres as standard measuring units. (iv) - Explain the importance of length and measurement using standard units.	- The classroom - Pupils themselves - Metre rule - 30cm ruler
6	Weight: - Comparing of weight of two different objects	Pupils should be able to: - Explain the meaning of weight. - Compare the objects based on their weights - Use the words 'lighter than and heavier than' as an expression of weight comparison.	Stone, oranges, coconut, Improvised scale string see-saw etc.
7	Capacity: - Introduction to capacity - Ordering to container based on their capacities	Pupils should be able to: (i) - Identify and name objects that could be used for measuring capacity e.g cups, empty container, spoons,	- Empty container - Spoons - Jerry can - Bucket - Empty bottle etc.



		bucket, jerry can. (ii) - Arrange containers based on their capacities e.g spoon, bottle, cup	
8	Two-dimensional shapes.	Pupils should be able to: (i) - Identify square, rectangle circle and triangular shapes of objects in their environment e.g (ii) - Surface of a table - orange - juice pack (tampico)	- Cubes, tins - Paper cuttings and drawings of squares, rectangles, triangle and circles.
9	Area	Pupils should be able to: (i) - Define Area (ii) - Compare the area of surfaces (iii) - Identify the use of standard measuring units. (iv) - Compare the area of different concrete objects such as squares, rectangles triangles and circles	Chart that shows plane shapes (Square, rectangle triangle and circles
10	3-dimensional shapes.	Pupils should be able to: (i) - Identify the curved faces of sphere and cylinder. (ii) - Count the corners of a cube and cuboid. (iii) - Identify the objects that are like cube and cuboid at home.	- Boxes, tins - ball, paper cuttings and drawing of cubes and cuboids, milk tin etc.
11	Data collection	Pupils should be able to: (i) - Explain data collection	- The Pupils - Cards
12	REVISION	REVISION	
13	EXAMINATION	EXAMINATION	



		arrange them in arrays. - collect data and arrange them in groups. e.g (a) group of boys (b) group of girls	- Wall ruler etc.
12	Revision of term's work.	Pupils should be able to: - Recapitulate the first and second term's lesson and ask questions for better clarification.	
	Practical work	i) Draw a big clock on a cardboard and label it. Cut another cardboard to indicate the hour and minute hands on the clock. Use crayon or water colour to paint the clock's hour and minute hands ii) - Use paper to cut the sizes of Nigeria currencies. Draw the pictures and label as applicable. Then use crayon to paint them.	- cardboard - crayon of different colours - scissors - pencil - Card board, - Crayon of different colour - Scissors - Pencil
13	Examination	Examination	



FIRST TERM MATHEMATICS PRIMARY 3 (8 YEARS)			
WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision of counting and writing numerals up to 999.	Pupils should be able to: (i) - Count numbers up to 999 (ii) - Write numbers up to 999 (iii) - State the place value of a digit in number up to 999	
2	Counting of whole number 1000 - 9999	Pupils should be able to: (i) - Write the numerals 1000 (ii) - Count in thousands up to 9000 (iii) - Identify the place value i.e Th, H, T, U in numbers from 1000 - 9000 (iv) - Count in thousands (th), Hundreds (H), Tens (T) and Unit (U).	- Charts on written whole numbers - Place value charts - Abacus.
3	Grouping Numbers in thousand, hundred, tens and unit (th, H, T, U)	Pupils should be able to: (i) - State the place value of a 4-digit number e.g $8462 = 8000 + 400 + 60 + 2$	- Charts of place - value of numbers
4	Ordering whole numbers with symbol $<$, $>$ and $=$	Pupils should be able to: - Express inequalities of 2 or 3 digit number using the terms greater than or less than or equal to. i.e Greater than $>$ Less than $<$ Equal to $=$ (a) $150 > 125$ (b) $1860 < 1916$ (c) $1250 = 1050 + 200$	- Inequalities charts - elbow sign



5	Fractions: ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$) - Fraction of shapes (square, circle, triangle and rectangle)	Pupils should be able to: (i) - Find the fraction of a group of concrete objects e.g oranges, apples, grapes (ii) - Identify fractions of a given shape	Concrete shapes, square, paper cuttings in shapes of square, circle, oranges charts on concrete objects.
6	Fractions: (a) Equivalent fraction (b) Ordering of fraction (c) Addition of Fractions of the same denominators.	Pupils should be able to: (i) - Write fractions which have the same value as a given fractions. (ii) - Use of symbols ($<$, $=$, $>$) for ordering fractions e.g (a) $\frac{1}{4} < \frac{1}{2}$ (b) $\frac{3}{5} > \frac{1}{3}$ (c) $\frac{1}{3} = \frac{2}{6}$ (iii) - Add fractions of the same denominators.	- Paper of equal size - Markers, coloured pencil or crayon - Inequality chart. etc
7	Addition of whole numbers: Without exchanging or remaining	Pupils should be able to: (i) - Write 3-digit numbers in the expanded form e.g $213 = 200+10+3$ Add pairs of 3-digit numbers without remaining or exchanging e.g $423 = 400+20+3$ $+256 = 200+50+6$ $679 = 600+70+9$ - Solve word problems on addition	
8	Addition of whole numbers 3-digit number with exchanging or remaining.	Pupils should be able to: (i) - Add 3-digit numbers with exchanging or remaining e.g (1) $\begin{array}{r} 365 \\ 436 \\ +801 \\ \hline 769 \end{array}$ (ii) $\begin{array}{r} 769 \\ 443 \\ +1212 \\ \hline 2442 \end{array}$ (ii) Solve word problems on addition	Counters: - Charts - Abacus.



9	Addition of 2 and 3 digit number using partial sum method	Pupils should be able to: (i) - Add 2-digit numbers using the partial sum method with speed and accuracy e.g $27 = 20 + 7$ $92 = 80 + 12$ (ii) - Add 3-digit numbers using the partial sum method with speed and accuracy e.g $284 + 519 = 284$ $\quad \quad 519$ $\quad \quad 803$ $13 = 4+9$ $90 = 80+10$ $700 = 200+500$ 803	- Charts and flash cards - Addition Cards etc.
10	Subtraction of whole numbers. 3-digit numbers without remaining and exchanging.	Pupils should be able to: - Perform subtraction on 3-digit numbers without remaining or exchanging. e.g $674 = 600+70+4$ $-522 = -500+20+2$ $152 = 100+50+2$	Counters such as: Stone, Sticks, bottle-tops et c.
11	Subtraction of whole numbers. i.e 2-digit number with exchanging or remaining.	Pupils should be able to: (i) subtract 2 digit numbers with remaining or exchanging e.g $845 = 800+30+15$ $-527 = 500+20+7$ $318 = 300+10+8$	Charts, abacus, subtraction cards, flash cards. etc.
12	First term revision work.	Pupils should be able to recall the first term work and ask questions on difficult area.	
13	Examination	Examination.	



MATHEMATICS

PRIMARY 3 8 YEARS

SECOND TERM

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	TEACHING RESOURCES
1	Revision of first term's work.	Pupils should be able to: (i) -Recall some of the first term's lesson. (ii) - Perfect the knowledge of counting and grouping of numbers (iii) Acquire more skills on fractions.	- Charts of numbers 100-999 - Place value charts -Charts of place-value of numbers
2	Addition and subtraction of fraction with the same denominator	Pupils should be able to: (i) -Add and subtract fractions with the same denominator e.g $(i) \frac{1}{2} + \frac{1}{2} = \frac{1+1}{2} = \frac{2}{2} = 1$ $(ii) \frac{3}{6} - \frac{2}{6} = \frac{3-2}{6} = \frac{1}{6}$ (ii)- Mention the need for correct addition and subtraction of numbers and fractions in everyday activities.	- Fractional card - Fraction board.
3	Multiplication of 2-digit number by 1-digit number.	Pupils should be able to: (i) - Multiply from 1 x 1 to 9 x 9. (Multiplication table) (ii) - Multiply 2-digit number e.g (i) $\begin{array}{r} 32 \\ \times 3 \\ \hline 96 \end{array}$ (ii) $\begin{array}{r} 43 \\ \times 5 \\ \hline 215 \end{array}$	- Multiplication table - Chart showing multiplication of 2-digit number by 1 digit number
4	Multiplication of three 1 - digit numbers taking two at a time	Pupils should be able to: (i) - Multiply three 1-digit numbers taking two at a time. e.g	



		$3 \times 5 \times 4 = 3 \times 5 \times 4 = 60$ $= (3 \times 5) \times 4$ or $3 \times (5 \times 4)$ $= 15 \times 4$ or 3×20 $= 60$ or 60	
5	The distributive rule of multiplication over addition and subtraction	Pupils should be able to: (i) -Expand using distributive rule eg $(i) 2 \times (3+4)$ $= (2 \times 3) + (2 \times 4)$ $= 6 + 8 = 14$ (ii) $3 \times (5-4)$ $= (3 \times 5) - (3 \times 4)$ $= 15 - 12 = 3$	Counters like beads, sticks, - 10 x 10 square charts - Multiplication table
6	Division of whole numbers without remainder	Pupils should be able to: - Divide whole numbers not exceeding 48 by 2, 3, 4 and 6 without remainder. eg $48 \div 4 = 40 + 8 \div 4$ $= (40 \div 4) + (8 \div 4)$ $10 + 2 = 12$	-Counters, charts containing division not exceeding 48
7	Factors of whole numbers not exceeding 48	Pupils should be able to: - Express whole numbers not exceeding 48 as product of factors e.g. $30 = 2 \times 3 \times 5$ - Find a missing factor in a given number e.g $30 = 2 \times 3 \times \square$ - Distinguish between factor and multiple. e.g: $2 = 2, 4, 6, 8, 10 \dots$ Multiple $4 = 4, 5, 16, 32 \dots$ Factors = $6 = 2, 3$ $8 = 2, 4$	- Charts of factors on whole number - Charts containing worked examples e.t.c.



8	Open sentences	Pupils should be able to: (i) Find missing number in an open sentence, (ii) Identify relationship between addition and subtraction. (iii) Solve related problems in Quantitative aptitude e.g $9 + \square = 16$ $20 - \square = 12$.	- Charts containing worked examples on open sentence.
9	Money (a) changing money not exceeding ₦20 into smaller units.	Pupils should be able to: (i) - Change money not exceeding ₦20 into smaller units. e.g: ₦5 = 500k ₦5 = 100(5k) ₦5 = 10(50k) etc. Note: ₦1 = 100k.	- Real money - Model money - Empty tin of milk. - Empty packet of sugar lipton etc. - Addition cards containing simple addition and multiplication.
(b)	Shopping involving addition and Subtraction	Pupils should be able to: (i) - Go for shopping effectively with money greater than ₦20 using the knowledge of addition and subtraction.	- Put price tags on different items or packs for shopping in the class.
10	Multiplication and Division involving Money	Pupils should be able to: (i) - Solve simple multiplication involving money with product not exceeding ₦200	Addition cards containing mental simple addition and multiplication.
11	Length	Pupils should be able to: (i) - Measure the length and width of a classroom, table, and straight edge of materials. etc.	Rope, tapes, ruler, desks and table.



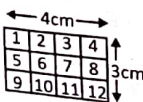
12	Revision of second ter's work.	Pupils should be able to: Recapitulate the second term work or lesson and ask questions on the difficult areas for clarification.	
	Practical work	PAPER MAT WEAVING Get two different colours of cardboard. Use scissors to cut out eight strips of 2cm by 30cm for each of the coloured cardboard. Put the eight strips of the same colour side by side and stabilize them on top with cello tape. Then, weave in and out with eight strips of the other coloured Cardboard.	- Cardboard of different colours. - scissors - long ruler or measuring tape - cello tape
13	Examinations	Examinations.	



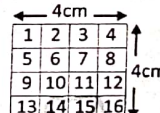
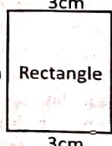
MATHEMATICS

PRIMARY 3 - (8 YEARS)

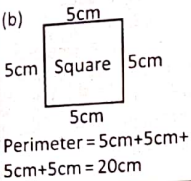
THIRD TERM

WKS	TOPICS (CONTENTS)	LESSON OBJECTIVES	LEARNING AND TEACHING RESOURCES
1	Revision of second term's work.	Pupils should be able to: (i) - Recall all the first and second term's lesson. (ii) - Recap every detail in multiplication and fraction (iii) - Find way of changing money and multiplication of money.	
2	Length II (a) compare non standard measures e.g arm length, (b) measurement in metres and centimetres.	Pupils should be able to: compare their non standard measures e.g - arm length, leg span, hand span (i) - Identify differences in a non standard measures. (ii) - Use metric table to learn metres and centimetres as standard measuring units (iii) - Identify the need for length and measurement using standardized units. (iv) - Convert cm to metres and vice-versa.	- Classroom - Arm length - Foot, as non standard measures. - Metre rule - 30cm ruler - Biro, Pencil. - Metric table chart
3	Area: Introduction of area by counting method.	Pupils should be able to: (i) - Find area of rectangles by counting units e.g (A) 	- Concrete objects on rectangle and square. - Charts containing area of rectangle and square by counting.



		Area = 12cm square. = 12cm ² (ii) - Apply the Formula or area of a rectangle i.e. Area = L x B. (iii) - Find the area of square by counting units. (B)  Area = 16cm square. (iv) - Apply the area of Square = L x B	
4	Perimeter	Pupils should be able to: (i) - Define Perimeter (ii) - measure regular figures in metres and centimetres. (iii) - measure and find the perimeter of regular shape like rectangle and square (iv) - Realise that perimeter is the distant round a particular shape. Thus: (a)  Perimeter = 3cm + 5cm + 3cm + 5cm = 16cm	- Ruler (30cm) - Concrete object of rectangle, square. - charts that containing the perimeter of rectangle and square.



		(b)  Perimeter = $5\text{cm} + 5\text{cm} + 5\text{cm} + 5\text{cm} = 20\text{cm}$	
5	Time: - Time on the clock - Calendar reading	Pupils should be able to: (i) - Say accurate time in hours and minutes and quarter to. (ii) - give dates in days and month (iii) - Mention the importance of time in daily life activities	- Clock charts - Real clock - Calendar etc - Song and rhymes on time.
6	Weight - Introduction of grams and kilo grams as units of measurement.	Pupils should be able to: (i) - Define weight (ii) - Measure weight of some objects in kilograms and grams. (iii) - Make meaningful comparison of weight of object like stones, rocks and minerals. Conversion of weight from kg to grams and vice-versa	(1) A scale or balance (2) Tins of milk and tomatoes (3) Chart on weight e.g 50kg gas Cylinder (4) Sample of different rocks and stone. - Metric table chart on weight
7	Capacity	Pupils should be able to: (i) - Identify litre as a unit of measuring capacity. (ii) - Measure liquid e.g water using a graduated cylinder up to any stated number of litres.	- Empty used Stringe, bottle. - Graduated cylinder - Empty container water etc. - Standard measurement bottles e.g. 50cl bottle of coke, 1L eva water, 35cl bottle of 7up etc.



8	Symmetry	Pupils should be able to: (i) - Define symmetry (ii) - Identify shapes with lines of symmetry. (iii) - State the properties of squares rectangles, triangles.	Plane shapes chart, Leaves, pictures, square, rectangles, triangle paper cuttings
9	Symmetry (contd)	Pupils should be able to: (i) - Distinguish between curves and straight line. (ii) - Draw line of symmetry on square, rectangle, triangle and circle.	Broom stick, straight edges objects, square corner, circular tins, coins, kite etc.
10	Everyday statistics Pictogram and mode.	Pupils should be able to: (i) - Read and present information in pictograms using vertical and horizontal arrangement. (ii) - Identify the most common features of pictogram (the mode)	- Cardboard of pictograms - cut outs of pictures for pictogram - Pictograms with one mode for each pictogram
11	Revision	Pupils should be able to: (i) - Recapitulate the first and second term's lesson. (ii) - Ask questions on the difficult areas.	
12	Practical work.	(i) Use empty tins of milk, wood or ruler, thread, nails to improvise weighing scale. (ii) - Expose pupils to see-saw and allow them to mount on it to practice the weight of different pupils.	- Tins of milk - Wood - Thread - Nails - See -saw playing equipment.
13	Examination	Examination.	