## MATHEMATICS SCHEMEE OF WORK STANDARD 7, 2020

## MATHEMATICS SCHEMES OF WORK STANDARD 7, 2020

TERM 1

WEE	LESSO	TOPIC/SUB	OBJECTIVES	T/L ACTIVITIES	T/L AIDS	REFERENCE	REM
K	N	TOPIC		,	,		
1	1 - 7		Opening	and Revisions			
2 & 3	1 - 7 1 - 7	NUMBERS Whole numbers Place value and total value. Reading and	The learner should be able to: Identify place and total values. Read and write numbers in symbols and in words. Work out square of numbers and square root of square numbers. Determine numbers divisible by	Identifying and working out place value and total value of numbers. Read and write numbers in	Chalk board illustration. Chart Pupils book	Improve your math pg 1 - 8 Understandin g math pg 1 - 8 Teachers	
3		Reading and writing. Square and square roots Divisibility test for 11	eleven.	symbols and in words. Work out square and square roots of numbers. Determine and recite the divisibility test for 11		guide pg 43 - 45	
4	1 - 7		Revision and	end month exams			
5	1 - 7	FRACTIONS Squares of fractions	The learner should be able to: Work out squares and square roots of fractions.	Work out squares of fractions. Work out square roots of fractions	Chart Chalkboard illustration.	Improve your math pg 10 - 11	

6	1-7	Square roots of fractions involving perfect squares  DECIMALS Place value and total value. Conversations.	The learner should be able to: Identify place and total values of digits in decimals Convert non recurring decimals to fractions. Convert fractions to decimals involving non recurring and recurring decimals. Work out square and square roots of decimals.	involving perfect squares.  Work out place and total values of decimals. Convert non recurring decimals to fractions. Convert recurring and non recurring decimals to fractions. Work out square	Chart Pupils book	Understandin g math pg 10 - 14 Teachers guide pg 46 - 47 Improve your math pg 12 - 19 Understandin g math pg 15 - 22 Teachers guide pg 48 - 51	
				Work out square and square roots of decimals.			
7			Mid Term 1 Ex				
8	1 - 7	PERCENTAG E Conversion of percentages into fractions and vice versa	The learner should be able to: Convert percentages to fractions and fractions to percentages. Convert decimals to percentage and vice versa.	Convert percentages to fractions and fractions to percentages. Convert decimals to percentages	Chart Chalkboard Illustration.	Improve your mathematics pg 20 - 22 Understandin g math pg 25 - 28	

		Conversion of		and percentages		Teachers	
		decimals.		to decimals.		guide pg 49 -	
				Discussion		54	
				Explanation.			
9	1 - 7	OPERATIONS	The learner should be able to:	Adding,	Improve your	Chalk board	
		Addition,	Add, subtract and multiply	subtracting and	math pg 23 -	illustration.	
		subtraction	whole numbers.	multiplying odd	31		
		and	Divide whole numbers by up ti	numbers.	Understanding		
		multiplication	3 digit numbers.	Dividing whole	math pg 29 -		
		involving	Work out problems involving	numbers.	45		
		whole	combined operations in whole	Work out	Teachers guide		
		numbers.	numbers.	problems on	book pg 55 -		
		Division	Recognize and identify number	combined	59		
		involving	sequence involving whole	operations in			
		whole	numbers.	whole numbers.			
		numbers.		Recognize and			
		Combined		identify number			
		operation in		sequence			
		whole		involving whole			
		numbers		numbers.			
		Number					
		sequence.					
9	1 - 7	FRACTION	Be able to:	Adding,	Cut outs	Improve your	
		Addition and	Work out addition, subtraction,	subtracting,	Chalk board	math pg 33 -	
		subtraction.	division and multiplication	multiplying and	illustration.	43	
		Multiplication	involving fractions.	dividing		Understandin	
		and division	Work out problems involving	fractions.		g math pg 46	
		Combined	combined operations in	Work out		- 50	
		operation.	fractions.	problems on			

	Number	Recognize and identify number	combined	Teachers	
	sequence.	sequence involving fractions.	operations in	guide pg 60 -	
			fractions.	64	
			Recognize and		
			identify number		
			sequence		
			involving		

				fractions.			
11	1 - 7	DECIMALS	Be able to:	Adding,	Chart	Improve your	
		Basic	Work out problems involving	subtracting,		math pg 45 -	
		operations	decimals using the four basic	dividing and		49	
		involving	operations that is:	multiplying		Understandin	
		decimals.	Addition, subtraction,	decimals.		g math pg 51	
		Combined	multiplication and division.	Work out		- 58	
		operations In	Work out problems involving	problems		Teachers	
		decimals.	combined operations in decimals.	involving		guide pg 65 -	
				combined		67	
				operations in			
				decimals.			

12	1 - 7	DECIMALS	Place value	The learner should be able	Work out place	Improve your	A chart	
			Total value	to;	and total	math pg 12 -	Cut outs	
			Converting	Identify the place and total	values of	19		
			decimals to	values of digits in	decimals	Understandin		
			fractions and	decimals.	Convert	g math pg 15		
			vice versa.	Convert non recurring	decimals to	- 22		
				decimals to fractions.	fractions.			

	Square roots	Convert fractions to	Convert		
	and square of	decimals involving non	fractions to		
	decimals.	recurring and recurring	decimals.		
		decimals.	Work out		
		Work out square and	squares and		
		square roots of decimals	square roots of		
		_	decimals.		
13	Revision	s and Preparations for End To	erm 1 Exams		
14		End Term 1 Exams and Clos	ing		

## TERM 2

WK	LSN	TOPIC	SUB TOPIC	OBJECTIVES	T/L	REFERENCE	T/L AIDS	RE
					ACTIVITIES			M
1				Opening and Revisions				
2	1 - 7	PERCENTAGES	Conversion of	The learner should be able	Convert	Improve your	A chart of	
			percentages to	to:	percentages to	math pg 20 -	conversions.	
			fractions and	Convert percentages to	fractions and	21		
			vice versa.	fractions and vice versa.	vice versa.	Understandin		
			Conversion of	Convert decimals to	Convert	g math pg 25		
			decimals to	percentages and	decimals to	- 27		
			percentages	percentages to decimals.	percentages			
			and vice versa.		and vice versa.			
3	1 - 7	FRACTIONS	Addition and	Be able to:	Adding and	Improve your	A chart	
			subtraction.	Work out addition,	subtracting	math pg 33 -	Cut outs	
			Multiplication	subtraction, multiplication	fractions.	43		
			and division.					

			Combined	and division involving	Multiplying	Understandin		
			operation in	fractions.	and dividing	g math pg 46		
			fractions.	Work out problems	fractions.	- 50		
			Number	involving combined	Work out			
			sequence.	operations in fractions.	combined			
			sequence.	Recognize and identify	operations in			
				number sequence	fractions using			
				involving fractions.	BODMAS.			
				Solve statement questions	Work out			
				involving fractions.	number			
				involving nactions.	sequence.			
					Solve			
					statement			
					questions			
					related to			
					fractions.			
4	1 - 7	DECIMAL	Addition and	Work out problems	Adding and	Improve your	A chart	
			subtraction	involving decimals using	subtracting	math pg 45 -		
			Multiplication	addition, subtraction,	decimals.	49		
			and division of	multiplication and	Multiplying	Understandin		
			decimals.	division.	and dividing	g math pg 56		
			Combined	Work out problems	decimals.	- 58		
			operations in	involving combined	Work out			
			decimals.	operations in decimals.	combined			
			Number	Work out questions on	operations in			
			sequence	number sequence	decimals.			
			Statement	involving decimals.	Work out			
			questions.	Work out statement	Number			
				questions in decimals	sequence.			

					Solve			
					statement			
					questions on			
					decimals			
5	1 - 7	PERCENTAGES	Percentage	Be able to:	Solve	Understandin		
		TERCENTAGES	increase and	Work out problems	problems	g math pg 60		
			decrease.	involving percentage	involving	g mam pg 00  - 63		
			uecrease.	increase and decrease.				
					percentage increase and	Improve your mathematics		
				Work out questions				
				involving application of	decrease.	pg 51 - 52		
				percentage increase and	Work out			
				decrease.	questions			
					involving			
					application of			
					percentage			
					increase and			
		7.5	7.1		decrease.			
6	1 - 7	Measurement	Identify units	The learner should be able	Identify dm,	Understandin	Cut outs of	
		Length	of length.	to:	Dm and hm as	g math pg 72	shapes	
	1 - 7		Convert units	Recognize and identify	units of	- 83	charts	
			of length	decimeter(dm)decameter(	measuring	Improve your		
			Perimeter of a	Dm) and hectometer(Hm)	length.	math pg 54 -		
			circle, triangle	as units of measurements.	Converting	61		
			and a	Convert units of length	units of length			
			quadrilateral.	from one to another.	from one to			
			Problems	Work out perimeter	another.			
			involving units	involving circles, triangles	Work out			
			of length in	and quadrilaterals.	perimeter of			
			real life		Circles,			

				Work out problems involving Units of length in real life. Work out problems on open and closed fences.	triangles, quadrilaterals. Work out problems involving units of length in real life. Work out problems on open and closed fence.			
7		3.5	T 1	Mid term exam and break		TT 1 . 1.		
8&9	1 - 7	Measurement Length	Identify units of length.	The learner should be able to:	Identify dm, Dm and hm	Understanding math pg 72 -	Cut outs of shapes	
			Convert units of length Perimeter of a circle, triangle and a quadrilateral. Problems involving units of length in real life	Recognize and identify decimeter(dm)decameter(D m) and hectometer(Hm) as units of measurements. Convert units of length from one to another. Work out perimeter involving circles, triangles and quadrilaterals. Work out problems involving Units of length in real life. Work out problems on	as units of measuring length. Converting units of length from one to another. Work out perimeter of Circles, triangles, quadrilaterals	83 Improve your math pg 54 - 61	charts	

					Work out problems involving units of length in real life. Work out problems on open and closed fence.			
10 & 11	1 - 7	AREA	Areas of circle, trapezium, parallelogram, boarders, combined shapes. S.A of cuboids, cubes and cylinders.	The learner should be able to: Calculate the area of a circle. Work out problems involving areas of circles. Calculate the areas of trapeziums and parallelogram. Work out problems involving areas of boarders and combined shapes. Calculate the surface areas of cubes, cuboids and cylinders.	Work out areas of circles practically. Work out problems involving area of circles using formulae. Work out area of trapezium and parallelogram s practically. Work out area of combined shapes and boarders.	Understanding math pg 85 - 97 Improve your math pg 62 - 74	Cut outs of shapes charts	

		Work out SA of cubes, cuboids and cylinders practically						
12	Re	visions and Preparations for End Term Exams						
<b>-1</b> 3								
14		End Term 11 Exams and Closing						

## TERM 3

WK	LSN	TOPIC	Sub topic	OBJECTIVE	T/L	REFERENCE	T/L	REM
					ACTIVITY		AIDS	
1	1 - 7			Opening a	nd revision			
2	1 - 7	Tables and	Linear scale	The learner should be	Determine	Progressive	A chart	
		graphs.	Table	able to:	appropriate scale	math pg 146 -	Chalk	
			involving real	Determine an	for graphs.	160	board	
			life situation.	appropriate scale for	Interpreting	Understanding	illustration.	
			Drawing	graph.	tables.	math pg 215 -		
			graphs.	Read and interpret	Represent data on	231		
			Reading and	tables in real life	bar graphs.	Learning math		
			interpreting	situations.	Work out	pg 134 - 150		
			graphs,	Represent data on bar	problems			
			Arithmetic	graphs, pie charts, travel	involving mean			
			mean and	graphs and line graphs.	and mode.			
			mode.					

				Work out problems involving mean and mode.				
3	1-7	Scale drawing	Linear scale ratio form. Conversion of scale from one form to another. Making scale drawing.	Should be able to: Read and write linear scale in ratio form. Convert linear scale from statement to ration form and vice versa. Work out problems involving scale drawing.	Read ratio form Chalk board illustration. Convert linear to statement scales. Convert statement to ratio form and vice	Understanding math pg 251 - 256 Progressive math pg 142 - 143 Learning math pg 151 - 156	Meter rule Oranges Bananas. Objects of different colors.	
4	1 - 7	Ratio and proportion	Ratio as a fraction Increasing and decreasing ratios.	Should be able to: Identify ratio as a fraction. Interpret ratio in sharing. Work out problems involving ratio using unitary methods	Interpret ratio Work out problems involving ratio. Increasing quantities of ratio. Decreasing	Progressive math pg 102 - 106 Learning math pg 157 - 164 Understanding	Chalk board illustration chart	

				Interpret and use ratio in increasing and decreasing quantities.	Quantities of ratio.	Math pg 237 - 246		
5	1 - 7	Revision	Time, speed	Should be able to:	Work out	Understanding	Chalk board	
		measurement	and	Work out problems	examples on	math pg 170 -	illustration.	
			temperature.	involving time, speed,		181	thermometer	

				distance and average speed. Work out problems involving temperature in degrees Celsius.	time, speed and distance. Discuss and explain working out questions on temperature in degrees Celsius. Doing exercise	Learning math pg 101 - 107 Thorough homework pg 213.		
6	1 - 7	Geometry	Quadrilaterals Angles Models Patterns	Should be able to: Recognize and identify angle properties of parallel lines and quadrilaterals. Work out problems involving angle properties of parallel lines. Construct right angle, isosceles and equilateral triangles using a ruler and a pair of compasses. Construct circles passing over vertices of a triangle.	Construct parallel lines. Perpendicular bisector of lines. Work out problems involving angle properties of parallel lines. Angle properties of square, rhombuses and parallelograms. Pythagorean theory. Nets of cubes,	Geometrical set Meter rule Cuboids Cube. Chalk board illustration.	Understanding math pg 184 - 197 Learning math pg 110 - 122 Thorough homework pg 58 - 63	
				Make cubes and cuboids.	Cuboids and cylinders. Making patterns			

7	1 - 7	Postal charges	Postal charges Telegrams Money orders Postal orders	Work out problems involving inland and international postal charges Identify money orders and postal orders. Work out problems involving telegrams.	Inland and international charges. Money and postal orders Write telegrams.	Stamps Chalk board illustrations Notes/coins	Understanding math pg 132 - 139 Thorough homework pg 150 - 171	
8	1-7	Money	Discount Commission Simple interest Hire purchase bills	Should be able to: Work out problems involving discounts and percentage discounts. Work out problems involving commission and percentage commission. Work out problems involving simple interest and hire purchase. Work out problems involving bills in buying and selling.	Discount and percentage discount. Work out commission and percentage commission. Work out simple interest and hire purchase Prepare bills.	Understanding math pg 117 Thorough homework pg 134 - 137 Learning math pg 81 - 91	Notes Coins Chalkboard illustration.	
	1-7	Algebra	Expressions Equations Inequality	Be able to: Form and simplify algebraic expressions	Explain the plot/ frame. Work out algebraic			

		Work out the value of	Expressions.	Understanding	Chalk board	
		algebraic expression.	Simplify	math pg 207 -	illustration	
		Form and solve	inequalities in	216	chart	
		expressions in one	one unknown.	Learning math		
		unknown.	Do an exercise.	pg 164 - 182		
		Simplify inequalities in				
		one unknown.				
9	1 - 7	End term year e	exams and closing			