

#### P5 MATHEMATICS SCHEME OF WORK TERM ONE

Wk	Pd	The	Т	S	Content	L/SK	Competer		Activity	Methods	Learnin	RS	R
		me	p	p		L	, , , , , , , , , , , , , , , , , , ,			/ tech	g material s		m
							Subject	Language					
2	2				TYPES OF SETS  i) Definition of a set. ii) Types of sets  EQUAL SETS i) Definition of an equal set. ii) Symbol of an equal set iii) Examples of equal sets		Learners should be able to: i) Define a set. ii) Name different types of sets. iii) Define an equal set iv) Give the symbol of equal sets v) Give examples of equal sets.	Leaners should: 1) Read vocabularies with correct intonation and pronunciation. 2) Spell the vocabularies correctly	Naming types of sets. Drawing set symbols Shading sets Applying symbols in given sets Reading applied symbols Doing some exercises	1) Class discussio n and Demonstr ation. Explanati on Discovery Question and answer.	Pens, sets, pencil. & Other real objects. - charts showing types of sets.	New Mk Primar y mathe matics 2000, Page 1	
		SET CONCEPTS	EQUAL SETS, EQUIVALENT SETS	Types of s ets	EQUIVALENT SETS  i) Definition of equivalent sets  ii) Symbol of equivalent sets  iii) Examples of equivalent sets.	Critical thinking and problem solving.	Learners should be able to:  i) Define an equivalent set  ii) Write the symbol of an equivalent set  iii) Form examples of equivalent sets through own experiences.					New Mk Prim ary math emati cs 2000, Page 1 - 2	

						Critica	Learners should be able	Leaners should:	Drawing set			
				NON	EQUIVALENT SETS	I	to:	3)Read	symbols	Class	Pens,	New
2				i)	Definition of non-	thinki	Define a non-	- vocabularies	Shading sets	discussio	sets,	Mk
				,	equivalent sets.	ng	equivalent set.	with correct	Applying	n.	pencil.	Primar
				ii)	Symbol of non-	and	Write the symbol of a	intonation and	symbols in	Demonstr	& Other	у
				'	equivalent sets	proble	non- equivalent set	pronunciation.	given sets	ation.	real	mathe
				iii)	Examples of non-	m	Form non-equivalent	4) Spell	Reading	Explanati	objects.	matics
					equivalent sets.	solvin	sets	vocabularies	applied	on	chart	2000,
				EMPT	Y SETS	g	Learners should be	correctly	symbols	Discovery	showing	Page 2
				i)	Definition of an empty		able to:		Doing some		types of	
					set.		i) Define an empty set.		exercises		sets.	
				ii)	Symbol of non-		ii) Write and identify the					
					equivalent set		symbols of an empty					
				iii)	Examples of an empty		set.					New
					set.		iii) Identify empty sets.					Mk
							Learners should be					Primar
		တ		INTER	RSECTION SETS		able to:					у
		CONCEPTS	ţ	i)	Definition of		i) Define intersection of					mathe
		戸	sets		intersection of sets.		sets					matics
		2	of	ii)	The symbol of		ii) Identify and Draw the					2000,
		္ပ	Types		intersection of sets.		symbol of intersection					Page 3
			'y	iii)	Finding number of		of sets.					
		SET			elements in		iii) State the number of					
					intersection.		intersection of sets.					
	_			iv)	Shading and		iv) Shade and represent					New
	2				representing		intersection on a venn					Mk
					intersection on a		diagram.					Primar
					Venn diagram.		v) Identify members of					У
				v)	Identifying members of		intersection.					mathe
					intersection.		vi) Derive members					matics
				vi)	Deriving members of		ofintersection from a					2000,
					intersection from a		venn diagram.					Page 4
					venn diagram.							- 7

2	2	CEPTS	Uni on of set s		i) Definition of union of sets. ii) Symbol for union of sets. iii) Finding union of sets. iv) Number of elements in the union of sets. v) Representing union sets on a Venn diagram.  THE DIFFERENCE OF SETS i) Definition of difference of sets. ii) How difference of sets is represented symbolically. iii) Diagrammatic representation of difference of sets. iv) Listing members of the difference of sets.	Critical thinkin g and putting inform ation on the Venn diagra m	Learners should be able to: i) Define union of sets. ii) Write the symbol for union of sets. iii) Form union of sets from given sets. iv) Write the number of elements in the union of sets. v) Represent union of sets on a Venn diagram. vi) Derive members of union of sets from a Venn diagram. Learners should be able to: i) Define difference of sets.	Leaners should: 3) Read vocabularies with correct intonation and pronunciation. 4)Spell vocabularies correctly.	Drawing set symbols Shading sets Applying symbols in given sets Reading applied symbols Doing some exercises	Class discussio n. Demonstr ation. Explanati on	Pens, sets, pencil. & Other real objects. chart showing types of sets.	New Mk Primar y mathe matics 2000, Page 8 – 12
	2	SET CONCEPTS (		Types of setsttt	v) Number of members in the difference of sets.		ii) Represent difference of sets symbolically. iii) Represent difference of sets diagrammatically. vi) Identify and list members of the difference of sets. iv) Write number of members in the difference of sets.					New Mk Primar y mathe matics 2000, Page 13 - 14

Γ				Set	l I		Critica	Learn	ers sh'd be able	Leaners should:	Drawing set	Class		I	
			(0	ele		SUB SETS OF A SET	I	to:	GIS SII U DE ADIE	3) Read	symbols	discussio	Pens,	New	
			SET				l Abimlei		Shade the	vocabularies			,	Mk	
				me		i) Description of a sub -	thinki	i)			Shading sets	n Domonotii	sets,		
		_	8	nts		set.	ng		required set on a	with correct	Applying	Demonstr	pencil.	Primar	
		2	Ž			ii) The symbol for a sub	and		Venn diagram.	intonation and	symbols in	ation.	& Other	У	
			CONCEPTS			set.	puttin	ii)	Identify elements	pronunciation.	given sets	Explanati	real	mathe	
			크			iii) Listing sub sets of a	g		from a given set	4) Spell	Reading	on	objects.	matics	
			တ်			given set.	inform		on the Venn	vocabularies	applied		chart	2000,	
						iv) Finding number of sub	ation		diagram.	correctly.	symbols		showing	Page	
						sets in a given set.	on the	iii)	State number of		Doing some		Venn	14 –	
						v) Representing subsets	Venn		elements in a		exercises		diagrams	16	
						on a Venn diagram	diagra		given set.		Carrying out		with		
						vi) Using the formula	m	Learn	ers sh'd be able		some		illustration		
								to:			demonstratio		s of		
								i)	Define a sub set.		ns by tossing		elements		
	3							ii)	Write the symbol		the coins and		in a set		
									for a sub set.		the dice.		and		
						PROBABILITY		iii)	List sub sets of a				subsets		
		2				i) Definition of			given set.						
						probability.		iv)	State number of						
						ii) Formula to find		,	sub sets in a						
						probability.			given set.						
						iii) Probability using a		v)	Represent sub						
						coin.		,	sets on a Venn						
						iv) Probability using a			diagram.						
						Dice.		Define	e probability.					New	
								i)	State the formula					Mk	
									used to find					Primar	
		2							probability.					y	
								ii)	Solve probability				Coin and	mathe	
								,	involving a coin				a dice.	matics	
									and a dice by					2000,	
									using the					Page	
									formular.					18 - 20	
									4						
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	1		DI.	DI.	THE MUMED ATION OVOTEM	0.00		I	01			
		_	Pla	Pla	THE NUMERATION SYSTEM	Critical	Learners sh'd be able	Leaners should:	Class		Q	
		T	ce	ce	<u>Introduction</u>	thinkin	to:	3) Read	discussion in	Chalkboar	- Chalk	New
		Н	val	val	i) Meaning of a	g and	<ol> <li>State the meaning</li> </ol>	vocabular	lesson ,	d	board	Mk
3		E	ues	ues	numeration system	proble	of Numeration	ies with	answering	illustration	illustration	Primar
				of	ii) The numeric symbols.	m .	system.	correct	oral	Explanati	- chart	у
				wh	E.g. 0, 1, 2, 3	solving	ii) Give examples of	intonation	questions	on	showing	mathe
		N		ole	iii) Formation of numerals		numeric symbols.	and	Doing an	Oral	place	matics
	2	Ü		nu	from digits. The largest		iii) Use given digits to	pronuncia	exercise	questionin	values.	2000,
	_	M		mb	and smallest.		form larger and	tion.	CACICISC	g and	values.	Page
		E			iv) The difference			Spell	l a a wa a wa'	answer.		24 - 25
				ers			smaller numbers		Learners'			24 - 25
		R			between the smallest		iv) Work out the	vocabularies	participation	Mental		
		Α			and largest numbers.		difference between	correctly.	in lesson as	work		
		Т					the smallest and		guided by the	Discussio		
					PLACE VALUES OF WHOLE		largest numbers		teacher.	n.		
		0			<u>NUMBERS</u>		formed.		Doing an			
		N			i) Place values of each		Learners sh'd be able		exercise			
					digit in a given number		to:					
					of up to hundreds of		i) State place values of					New
	2				thousands.		each digit in a given					Mk
	_	S			ii) Place values of		number of up to					Primar
		Y			underlined digits in a		hundreds of					y
		S			given number.		thousands.					mathe
		T			given number.							
							ii) Identify place values					matics
		E			VALUE OF WILD F		of underlined digits in					2000,
		M			VALUES OF WHOLE		a given number.					Page
					<u>NUMBERS</u>		Learners sh'd be able					26
					i) Finding values of each		to:					New
	2				digit in a given		<ul><li>i) Work out values of</li></ul>					Mk
					number.		each digit in a given					Primar
					ii) Finding values of		number.					y
					underlined digits in a		ii) Work out values					mathe
					given number.		of underlined					matics
					9		digits in a given					2000,
							number.					Page
							namber.					27
												21

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			Wri	Wri	Leaners should:	
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						y mathe
			wor	wor		
		N	ds	ds		matics
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		M				Page
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						29

			Exp	Exp		Critical		Leaners should:	Learners'	Chalkboar		
		Т	and	and	EXPANDING WHOLE	thinkin	Learners should be able	5) Read	participation	d	Chart	New
		Н	ed	ing	NUMBERS USING VALUES	g and	to:	vocabular	in lesson as	illustration	showing	Mk
		E	for	wh	i) Revision on values of	proble	i) Work out the	ies with	guided by the	_	Place	Primar
			m	ole	digits in a given	m	values of digits in	correct	teacher.	Explanati	values	у
			of	nu	number.	solving	a given number.	intonation	Doing an	on	Chalkboar	mathe
	2	N	wh	mb	ii) Expanding numbers	Joiving	ii) Expand numbers	and	exercise	Oral	d	matics
		Ü	ole	ers	using values		with the help of	pronuncia	CACICISC	questionin	illustration	2000,
		M		615	using values		values	tion.			iliustiation	
			nu				values			g and	•	Page
		E	mb					Spell		answer.		30
		R	ers					vocabularies		Mental		
		Α						correctly.		work		
4		Т							Learners	Discussio		
		ı							participation	n.		
		0							in lesson as	Learners'		
		N							guided by the	participati		
					EXPANDING WHOLE				teacher.	on in		
					NUMBERS AS MULTIPLES		Learners should be able		Doing an	lesson as		
	2				OF TEN		to:		exercise	guided by		
		S			i) Revision of values of		i) Solve the values			the		New
		Y			digits in a given		of digits in a given			teacher.		Mk
		s			number in multiples of		number in			Doing an		Primar
		T			ten.		multiples of ten.			exercise		
										exercise		y
		E			ii) Expanding whole		ii) Expand whole					mathe
		M			numbers using		numbers using					matics
					multiples of ten.		multiples of ten.					2000,
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			Exp	Exp	Crit			Leaners should:			
		Т	and	and	EXPANDING NUMBERS thin	in <b>Lea</b>	rners sh'd be able	6) Read			
		Н	ed	ed	USING POWERS/ g ar	d <b>to:</b>		vocabular			
4		E	for	for	EXPONENTS prol		Supply powers to	ies with			
	2		m	m	i) Supplying powers to m	.,	digits in a given	correct			
	-		of	of	digits in a given solv	na	number to aid	intonation			
		N	wh	wh	number to aid	''9	expansion.	and			
		Ü	ole	ole	expansion.		схранзюн.	pronuncia			
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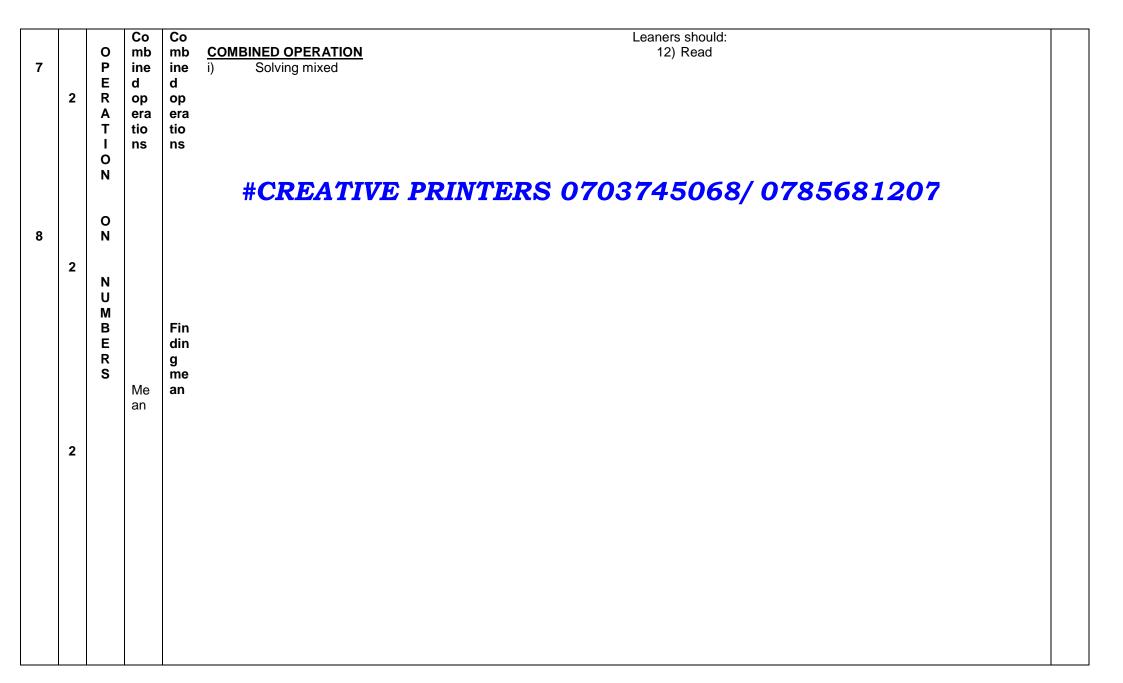
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			De	Val			Critical				should:	Identifying	Chalkboar		
_		Т	cim	ues		ES OF DIGITS IN	thinkin		ers should be able	,	Read	place values	d	Chart	New
5		Н	al	of	DECIM		g and	to:			vocabular	of each digit.	illustration	showing	Mk
	2	E	nu	dec	i)	Work out the values of	proble	i)	Work out the		ies with	Doing an		Place	Primar
			mb	ima		digits in decimal	m		values of digits in		correct	exercise.	Explanati	values	у
			ers	1		numbers.	solving		decimal numbers.		intonation		on	including	mathe
		N		nu	ii)	Work out the values of		ii)	Work out the		and		Oral	Decimal	matics
		U		mb		underlined digits in			values of		pronuncia		questionin	numbers	2000,
		М		ers		decimal numbers.			underlined digits		tion.		g and	Chalkboar	Page
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		R			#CR	EATIVE PR	<b>118 T</b> 1	LK	numbers 3/4	Poeabel		93097	Mental	illustration	35
		Α								correctly			work		
		Т						Learn	ers should be able		,		Discussio		
		l ı			WRITII	NG DECIMAL		to:					n.		
	2	0				ERS IN WORDS		i)	State the place						
		N			i)	Place values of digits		-,	values of digits in						
					.,	in decimal numbers.			decimal numbers.						New
					ii)	Writing decimal		ii)	Write decimal						Mk
					,	numbers in words.		,	numbers in words						Primar
		S			L										y
		Y	#C	RE	GAT	IVE PRINTE	RS	<i>07</i> 0	13745068	<b>3/ 0</b> 7	<b>7856</b>	81207			mathe
		S							correctly.	•					matics
		T													2000,
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		M			WRITII	NG DECIMAL		Learn	ers should be able						35
	2	IVI				TIONS IN FIGURES		to:	ers silould be able						
	_				i)	Writing decimal		i)	Write decimal						New
					יי	fractions in figures.		1)	fractions in words						Mk
					::\										Primar
					ii)	Writing up to			to figures up to						
						hundredth decimal			hundredth.						y
						fractions in figures.									mathe
															matics
															2000,
															Page
															35 - 36
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			Loonage about di	
6	2	T H E	Leaners should:  EXPANDING DECIMAL Learners should be able to:  i) Expanding decimal  Leaners should:  8) Read  to:  i) Expanding decimal	New Mk Primar y
		NUMERATIO	#CREATIVE PRINTERS 0703745068/ 0785681207	mathe matics 2000, Page 36
	2	N		New
		S Y S T E M	#CREATIVE PRINTERS 0703745068/ 0785681207	Mk Primar y mathe matics 2000, Page 37
	2			New Mk Primar y mathe matics 2000, Page3 8

			D.	D٠		Critical			Lacas	o obould.	Loornoro'	Challthaar		
		_	Ro	Ro	BOUNDING OFF WILES	Critical	1	علطه مطالحان مطع مسم		s should:	Learners'	Chalkboar	Challtha	Navi
6		T	und	und	ROUNDING OFF WHOLE	thinkin		ers should be able	9)	Read	participation	d	Chalkboar	New
		Н	ing	ig	NUMBERS	g and	to;			vocabular	in lesson as	illustration	d	Mk
		E	off	off	i) Using a number line to	proble	i)	Use a number		ies with	guided by the		illustration	Primar
				wh	aid in rounding off	m		line to aid in		correct	teacher.	Explanati		У
	2			ole	numbers.	solving		rounding off		intonation	Responding	on		mathe
		N		nu	ii) Rounding off to the			numbers.		and	to oral	-Oral		matics
		U		mb	nearest tens.		ii)	Round off		pronuncia	questions	questionin		2000,
		M		ers	iii) Rounding off to the			numbers to the		tion.	Learners will	g and		Page
		E			nearest Hundreds			nearest tens.	Spell		do an	answer.		39 –
		R			iv) Rounding off to the		iii)	Round off	vocabu	ılaries	exercise.	Discussio		44
		Α			nearest thousands.		,	numbers to the	correct	ly.		n.		
		Т						nearest		•	Learners'			
		ı						Hundreds.			participation			
		0					iv)	Round off			in lesson as			
		N					,	numbers to the			guided by the			
	2							nearest			teacher.			
					ROUNDING OFF DECIMAL			thousands.			Responding			
					NUMBERS						to oral		Chalkboar	
		S			i) Rounding off numbers						questions		d	
		Υ			to the nearest tenth.						40000000		illustration	New
		S			ii) Rounding off numbers									Mk
		T			to the nearest								-	Primar
		Ē			Hundredth.		l earn	ers should be able						y
		M			ridial catil.		to:	oro orrodia be able						mathe
		141					i)	Round off						matics
							1)	numbers to the						2000,
								nearest tenth.						Page
							ii)	Round off						44
							11)	numbers to the						44
								numbers to the nearest						
								hundredth.						

		Learner	s should be able Leaners should:	
7		ADDITION UPTO SIX DIGITS to:	10) Read New Arrange digits Mk Primar y	
	2		mathe matics 2000, Page	
			47 – 49	
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	2		New Mk Primar	
			y mathe matics	
			2000, Page 50 - 51	

			1		T				T	1		1	T	
		_	Mul	Mul		Critical		rners should be able	Leaners should:					
		0	tipli	tipli	MULTIPLICATION BY A TWO	thinkin	to;		11) Read	Chalkboard	Learners'	Chalkboar	New	
7		Р	cati	cati	DIGIT NATURAL NUMBER	g and	i)	Arrange digits	vocabular	illustration.	participati	d	Mk	
		Ε	on	on	i) Arranging digits	proble		vertically in	ies with	Explanation	on in	illustration	Primar	
		R		of a	vertically in respect of	m		respect of place	correct	Oral	lesson as		У	
		Α		two	place values before	solving		values before	intonation	questioning	guided by		mathe	
	2	Т		by	multiplying.			multiplying.	and	and answer.	the		matics	
		ı		two	ii) Multiplying two digit		ii)	Multiply two digit	pronuncia	Discussion.	teacher.		2000,	
		0		digi	numbers.			numbers.	tion.		Learners		Page	
		N		t	iii) Applying carrying		iii)	Carry when	Spell		will do an		52 –	
				nu	when multiplying two			multiplying two digit	vocabularies		exercise.		56	
				mb	digit numbers.			numbers.	correctly.					
		0		er	iv) Carrying out		iv)	Solve numbers						
		N			multiplication involved			involving						
					in word problem.			multiplication in						
								word problem.						
		N					Lea	rners should be able						
		U					to:				Learners'			
		M					i)	Apply divisibility test			participati			
		В			DIVISION OF NUMBERS.			to easily divide			on in			
	2	Ε			i) Divisibility test.			numbers.			lesson as	Chalkboar		
		R			ii) Comparing		v)	Compare			guided by	d		
		S			multiplication with			multiplication with			the	illustration	New	
					division.			division.			teacher.		Mk	
					iii) Dividing three digit		vi)	Divide numbers			Learners		Primar	
					numbers with and			by multiples of 10			will do an		У	
					without remainders.			with remainder.			exercise.		mathe	
					iv) Dividing numbers by		v)	Divide three digit					matics	
					multiples of 10.			numbers with and					2000,	
								without remainders.					Page	
							vi)	Solve numbers					57 - 59	
								involving division in						
								word problems.						
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							Critical	Learn	ners should be able	Leaners should:				
		0			SYME	BOLS >, <, ≥, ≤ AND =	thinkin	to:	J Cilouid DC ubic	13) Read	Chalkboard	Respondi	Chart of	New
8		P			i)	The meaning of each	g and	i)	State the	vocabular	illustration.	ng to oral	symbols	Mk
		E			''	symbol.	proble	.,	meaning of each	ies with	Explanation	questions	with what	Primar
	2	R			ii)	Applying each symbol	m		symbol.	correct	Oral	Learners	they	y
		Α			,	in different	solving	iii)	Apply each	intonation	questioning	will do an	mean.	mathe
		T				mathematical phrases.		,	symbol in a given	and	and answer.	exercise.		matics
		ĺ				matromatical princess.			mathematical	pronuncia	Mental work			2000,
		0							phrase.	tion.	Demonstratio			Page
		N						Learr	ners should be able	Spell	n.			66
					BASE	<b>FIVE AND TEN</b>		to:		vocabularies	Discussion.			
					i)	Meaning of decimal		i)	State the	correctly.			Chalkboar	
	2	0			,	system.		,	meaning of	,			d	
		N			ii)	Meaning of non-			decimal system.				illustration	
					,	decimal system.		ii)	State the					New
					iii)	Counting in base five.		,	meaning of non-					Mk
		N	Ва		iv)	The basic digits of			decimal system.					Primar
		U	ses		,	base five.		iii)	Count in base					у
		M							five.					mathe
		В						iv)	Mention the basic					matics
		Е			PLAC	E VALUE		,	digits of base five.					2000,
		R			i)	Place values of each		Learr	ners should be able					Page
		S		Ва	,	digit in base five		to:						68 –
				se	ii)	Finding the values of		i)	Work out the					69
	2			five		each digit in base five			place values of				Chart	
				an		numbers with up to			each digit in a				showing	
				d		three digits.			base five number.				place	
				bas				iii)	Work out the				values of	New
				е					values of each				base	Mk
				ten					digit in base five				numbers	Primar
									numbers with up					У
									to three digits.					mathe
														matics
														2000,
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T mb ii) Finding the remainder ers after each consecutive to division carried out.  iii) Obtain the remainder after each consecutive tion.  Discussion.  The matical matical matical pronuncia to the teacher.  Discussion.  Discussion.  The matical matical matical pronuncia to the teacher.  Page	<del></del>					11			10	1				1	
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Primary (a) The state of the st							ners snould be able								
R A n of nu base five. T mb ii) Finding the remainder after each consecutive to division carried out.  R A n of nu base five. T mb ii) Finding the remainder after each consecutive to division carried out.  R A n of nu base five. T m solving to base ten to base five. Iii) Obtain the remainder after each consecutive tion.  C correct or intonation questioning and answer. I meaninder after pronuncia mental vork the teacher.  Discussion.  Discussion.  Discussion.  Discussion.												ses			_
2A T Inu mb ersbase five. after each consecutive tosolving ii)to base five. iii)to base five. obtain the remainder after each consecutiveintonation and remainder after each consecutivequestioning and answer. math pronuncia tion.guided by the math matic pronuncia tion.math matic pronuncia tion.	imar	Primar	illustration		•			i)		, ,					9
T mb ii) Finding the remainder lii) Obtain the remainder and and answer. the matic pronuncia Mental work teacher.  O to division carried out. iii) Obtain the remainder after each consecutive each consecutive tion. Discussion. Learners Page		,	•								_				
Iersafter each consecutiveremainder afterpronunciaMental workteacher.2000Otodivision carried out.each consecutivetion.Discussion.LearnersPage		mathe							solving		-			2	
O to division carried out. each consecutive tion. Discussion. Learners Page		matics						ii)			mb		Т		
	,	,		teacher.		pronuncia					ers		I		
1		Page			Discussion.								0		
	<u>:</u>	72		will do an		Spell	division carried			iii) Reading the answer	diff		N		
ere from the remainder out. vocabularies exercise				exercise							ere				
nt column. iii) Read the answer correctly.						correctly.	Read the answer	iii		column.	nt				
O bas from the											bas		0		
N es remainder column							remainder column				es		N		
from down up Learners'				Learners'			from down up								
wards. participati				participati			wards.								
N on in Chalkboar			Chalkboar	on in									N		
2 U ADDITION IN BASE FIVE Learners should be able			d	lesson as			ners should be able	L		ADDITION IN BASE FIVE			U	2	
M i) Digits applied in base to: guided by illustration   New	∍w	New	illustration	guided by				to		i) Digits applied in base			M		
B   five.   i) Name the   the  .   Mk	K	Mk		the			Name the	i)		five.			В		
E ii) Use of division to get operational digits teacher. Prima	imar	Primar		teacher.			operational digits			ii) Use of division to get			E		
R the remainder. of base five when Respondi y		У		Respondi			of base five when			the remainder.			R		
S   iii) Regrouping the whole   adding.   ng to oral   math	athe	mathe		ng to oral			adding.			iii) Regrouping the whole			S		
	atics	matics		•			Use division to	ii)							
	00.	2000,					get the	'		remainders to obtain					
he answer. remainder. will do an Page	age	Page		will do an			remainder.			he answer.					
iii) Regroup the exercise 73	,	73		exercise			Regroup the	iii							
whole number															
Ad and the											Ad				
diti remainders to															
on obtain he answer.															
in iv) Add in base five.								iv							
bas   I   I   I   I   I   I   I   I   I								'							

10	2	O P E R A T I O N O N	Ba ses	Mul tipli cati on in bas e five	MULTIPLICATION IN BASE FIVE  i) Carry out simple multiplication.  ii) Maintaining the operational digits in base five by division and a remainder obtained.  iii) Multiplying numbers in base five.	Critical thinkin g and proble m solving	Learn to: i) ii)	Carry out simple multiplication. Maintain the operational digits in base five by division and a remainder obtained. Multiply numbers in base five.	Leaners should:  16) Read  vocabular  ies with  correct  intonation  and  pronuncia  tion.  Spell  vocabularies  correctly.	Chalkboard illustration. Explanation Oral questioning and answer. Rote Discussion.	Learners answer oral questions in time of discussio n Chalk board illustration	Chalkboar d illustration	New Mk Primar y mathe matics 2000, Page7 4
	2	NUMBERS	Fin ite sys te m	Clo ck arit hm etic	CLOCK ARITHMETIC  EXPRESSING NUMBERS IN FINITE 5 AND 7.  i) Explanation of clock arithmetic.  ii) Explanation of finite system.  iii) Application of division in the finite system.  iv) Finding the remainder after division as the answer		Learn to: i) ii) iii) v)	Explain clock arithmetic. Explain finite system. Divide in the finite system. Read the remainder after division as the answer Express numbers in finite 5 and 7.				Chalkboar d illustration .	New Mk Primar y mathe matics 2000, Page 204 and 208 - 9

		T	1	1	1			1		Γ.	1		1	1
		_					Critical	1.		Leaners should:				]
		0			ADDIT	TION USING A DIAL	thinkin		ners should be able	17) Read	Chalkboard	Drawing	Chalkboar	New
10		Р			i)	Drawing a dial.	g and	to:		vocabular	illustration.	dials	d	Mk
		Ε			ii)	Identifying the digits	proble	i)	Draw a dial.	ies with	Explanation	Demonstr	illustration	Primar
	2	R	#(	RE	CAT	Type in the state of the state	RIS	(i)7(	O Servify the digite &	3/ <b>07856</b>	207	ation of	-	У
		A	"				Solving				questioning	mov't of		mathe
		Ţ			iii)	Inserting the digits of a			and 7	and .	and answer.	the dial		matics
		l				particular finite in a			respectively.	pronuncia	Mental work	clock and		2000,
		0				dial.		iii)	Insert the digits of	tion.	Demonstratio	anticlock		Page
		N		Clo	iv)	Clockwise movement			a particular finite	Spell	n.	wise		211
			Fini	ck		for addition in positive			in a dial.	vocabularies	Discussion.			
		_	te	arit	,	integers.		iv)	Demonstrate	correctly.				
		0	sys	hm	v)	Applying addition of			clockwise					
		N	tem	etic		numbers in the finite			movement on a					
						system.			dial for addition in					
								,	positive integers.					
		N						v)	Apply addition on a dial for numbers			L compone'		
		U										Learners'		
		M B							in the finite			participati on in oral		
		E							system.					
		R		<b>#C</b>	KEZ.	ON NO BUT USING A DIAL.	TER	SU	17037450	<b>68/ 0785</b>	568120	guestions and	Chalkboar	
		S			<u> </u>	Carrying out simple				•		answer.	d	
		3			'/	addition in finite		Learn	ners should be able			Respondi	illustration	New
						system.		to:	icis siloulu be able			ng to oral	illustration	Mk
	2				ii)	Applying division to		i)	Carry out simple			questions	•	Primar
	_				")	get the remainder		1)	addition in finite			Learners		V
						considered to be the			system.			will do an		mathe
						answer.		ii)	Apply division to			exercise		matics
						answer.		'''/	get the remainder			CACIOISC		2000,
									considered to be					Page
									the answer					212
									trio ariowor					
1														

						Critical	Lea	rners should be able	Leaners should:				
					INTEGERS	thinkin	to:	illers silould be able	18) Read	Chalkboard	Mental	Chalkboar	New
10					i) Definition of integers.	g an d	i)	Define integers.	vocabular	illustration.	work	d	Mk
10					ii) Description of positive	proble	ii)	Describe positive	ies with	Explanation	Learners'	illustration	Primary
							11)	•	correct	Oral	participati	illustration	mathe
	2				integers. iii) Representing positive	m solving	iii)	integers.			on in	Chart	
						Solving	1111)	Represent positive	intonation	questioning			matics
		I N		Λ	integers on a number			integers on a	and	and answer.	class	showing	2000,
		N T		Arr	line.		:\	number line.	pronuncia	Rote	discussio	parts of a	Page
		-		ang	iv) Description of negative		vi)	Describe negative	tion.	Discussion.	n.	number	95 – 96
		E		ing	integers.		. ,	integers.	Spell			line.	
		G		inte	v) Writing expressions		iv)	Give expressions	vocabularies				
		E		ger	that represent			that represent	correctly				
		R		S	negative integers.			negative integers.					
		S		on				rners should be able					
			Inte	а			to:						
			ger	nu			i)	Identify negative and					
			S	mb	THE MIMBER LINE AND			positive integers.			D		
				er	THE NUMBER LINE AND		ii)	Describe the			Drawing		
				line	ORDERING INTEGERS			Symbols used for			number		N.
					i) Integers on a number			the positive and			lines		New
					line.		:::\	negative integers.			Ordering		Mk
	2				ii) Symbols used for the		iii)	Draw a number line.			integers		Primary
					positive and negative		iv)	Place integers on a			on a		mathe
					integers respectively.			number line.			number		matics
					iii) Drawing a number		v)	Order integers using			line.		2000,
					line.		:\	a number line.			Doing a		Page
					iv) Placing integers on a		vi)	Compare the			given		97 - 98
					number line.			directions of			exercise.		
					v) Ordering integers			integers on a					
					using a number line.			number line					
					vi) Comparing the								
					directions of integers on a number line.								
					on a number line.								

		1	1						
					Critical			Learners should:	
				ORDERING INTEGERS			ers should be able	19) Read	
11				<u>USING SYMBOLS</u> <, >, <u>&lt;</u> , <u>&gt;</u>	g an d	to:			
				i) The meaning of each	proble	i)	State The		
	2			symbol.	m		meaning of each		
				ii) Ordering the integers	solving		symbol.		
		I							
		N							
		Т							
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	2								
				The inverse area and			Otata tha lawara		
				v) The inverse property.		v)	State the inverse		
				vi) Working out the		• \	property.		
				additive inverses of		vi)	Work out the		
				integers on a number			additive inverses		
				line.			of integers on a		
							number line.		
1									
1									

										_		1	
						Critica		ers should be able	Leaners should:				
					ADDITION OF INTEGERS	I	to:		20) Read	Chalkboard	Mental	Chalkboar	New
11					USING A NUMBERLINE.	thinki	i)	Identify positive	vocabular	illustration.	work	d	Mk
	2				i) Identifying positive and	ng		and negative	ies with	Explanation	Learners'	illustration	Primary
				Ad	negative directions on	and		directions on the	correct	Oral	participati		mathe
				diti	the number line in	proble		number line in	intonation	questioning	on in	Chart	matics
				on	respect of the given	m		respect of the	and	and answer.	class	showing	2000,
		I		of	integers to be added.	solvin		given integers to	pronuncia	Mental work	discussio	parts of a	Page
		N		inte	ii) Carrying out the actual	g		be added.	tion.	Discussion.	n.	number	102 -
		Т		ger	addition on the		ii)	Carry out the	Spell		Drawing	line.	104
		E		S	number line.		,	actual addition on	vocabularies		number		
		G		on	iii) Showing the answer			the number line.	correctly		lines		
		Е		а	u en the number line 775	DDI	;;;)	Show the answer	TAFOCOL	07056	Adding		
		R		nu	# Cather Burght Line E	PKI	VIE	the number of	745068/	07856	<b>and 20</b>		
		S	Inte	mb	3			line using the			subtractin		
			ger	er				doted line.			g integers		
			s	line	SUBTRACTION OF		Learn	ers should be able			on a		
					INTEGERS USING A		to:				number		
					NUMBERLINE.		i)	Identify positive			line.		
					i) Identifying positive and		'	and negative				Chalkboar	
					negative directions on			directions on the				d	New
	2				the number line in			number line in				illustration	Mk
					respect of the given			respect of the					Primary
					integers to be added.			given integers to				Chart	mathe
					ii) Carrying out the actual			be added.				showing	matics
					subtraction on the		ii)	Carry out the				parts of a	2000,
					number line.		<b>'</b>	actual (-) tion				number	Page
					iii) Showing the answer			on the number				line.	105
					on the number line			line.					108
				sub	using the doted line.		iii)	Show the answer					
				trac	3		,	on the number					
				tion				line using the					
				of				doted line.					
				inte									
				ger			1						
				S			1						
				on			1						
				а			1						
				nu			1						
				mb									
				er									
				line			1						

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				For		Proble			Leaners should:					
				min	FORMING MATHEMATICAL	m	Learn	ers should be able	21) Read	Chalkboard	Mental	Chalkboar	New	
11			Inte	g	STATEMENTS FROM	solving	to:		vocabular	illustration.	work	d	Mk	
			ger	mat	NUMBER LINES.		i)	Identify where to	ies with	Explanation	Learners'	illustration	Primary	
	_		S	he	i) Starting from zero			start from when	correct	Oral	participati		mathe	
	2	_		mat	#ChrematicaTIVE	PRIN	ITE	Riting Otto 203	745 <b>/188</b> 9	Christianing 6	8 <sup>n</sup> <b>i</b> 20	7	matics	
		!		ical									2000,	
		N		stat	statement.			statement from a	pronuncia	Mental work	discussio		Page10	
		T		em	ii) Locating the answer		::\	number line.	tion.	Discussion.	n.		9 – 110	
		E G		ent	from the number line.		ii)	Locate the answer from the	Spell		Drawing			
		E		s fro				number line.	vocabularies correctly		number lines			
		R		m a			iii)	Interpret and write	Correctly		Interpretin			
		S		nu			III <i>)</i>	statements on a						
		3		mb				number line			g statement			
				erli				Hamber line			s on a			
				ne							number			
				110							line.			
					ADDITION OF INTEGERS		Learn	ers should be able			Mental			
					WITHOUT USING A NUMBER		to:				work	Chalkboar		
					LINE.		i)	State some			Learners'	d	New	
					i) Some important points			important points			participati	illustration	Mk	
					to note when adding			to note when			on in		Primary	
					integers.			adding integers.			class		mathe	
	2				<li>ii) Carrying out addition</li>		ii)	Carry out addition			discussio		matics	
					without using a			of integers			n.		2000,	
					ii#CREALTIVE P	RINT	rr.R	without using 3 7	45068/ 0	78568	1207		Page11	
					*		1		10000, 0	70000	1207		1	
					inverse.		iii)	Easily use the						
								additive inverse						
								property when						
								adding integers.						

11	2	I N T E G E R S	Inte ger s	Su btra ctio n of inte ger s	SUBTRACTION OF INTEGERS WITHOUT USING A NUMBER LINE.  i) Subtraction of integers without using a number line.  ii) Making use of greater or less than to determine the answer.  iii) Transforming [- ] into as positive.  iv)	Proble m solving	Learners should be able to:  i) Subtract integers without using a number line.  ii) Making use of greater or less than to determine the answer.  v) Transforming [- ] into as positives o as to carry out subtraction easily.	Leaners should: 22) Read vocabular ies with correct intonation and pronuncia tion.  Spell vocabularies correctly	Chalkboard illustration. Explanation Oral questioning and answer. Mental work Discussion.	Mental work Learners' participati on in class discussio n.	Chalkboar d illustration	New Mk Primary mathe matics 2000, Page11 2
			1	# <b>C</b> 1	REATIVE PRIN'	rer	S 07037450	68/ <b>07</b> 85	<b>68120</b>	7		

Proble Leaners should:

WRITING BASE FIVE m Learners should be able 23) Read

NUMBERS IN WORDS solving to:

Convert base five

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iii)

expanding in base five by multiplication and addition.

Converting base five

iv) Adding the expanded expression to find base ten.

### Learners should be able

to:

- iii) Expand in base five by using multiplication and addition.
- iv) Add the expanded expression to find base ten.

## **PRIMARY FIVE MTC SCHEME OF WORK TERM TWO**

					1 1/11					1110			
<u>wk</u>	<u>PD</u>	THM	TPC	S/TP	L/SKL	COMPETEN	CES	CONTENT	MET H	A) S/ACT	L/AID	REF	RE
	•			•	•	SUBJECT	LANGUAGE						
2	1 4	ALGEBRA <b>C.R</b> .	AL <mark>Æ</mark> BRA	COLLECTING LIKE TERMS	Critical thinking and problem solving	The learner  1. Sorts and groups similar items.  2. Uses an appropriate letter to represent the letter to represent the considering application of BODMAS.  4. Collects like terms involved in word	Read words correctly.  Writes BODMAS in full.	COLLECTING LIKE TERMS  Example: Write the following in short:  Per Spen SerI+2  1pen Let each pen be p p + p + p + p = 4p = 4 pens	<ul><li>Demonstration</li><li>Discussion</li></ul>	Collecting like terms	Chalkboard illustration, pens, pencils, rubbers, stones, books etc.	A NEW MK PRIMARY MTC BK 5 PAGE 267 – 268	
						problems The Learner:  Divites ar Algebras  expression by either adding or subtracting  Collects like terms and simplify where necessary.		SIMPLIFYING  ALCESTATIST  ION  Example:  Write in short form:  q + 7q + 4q  = 12q	<b>07</b> Discussion	Collecting like terms	Chalkboard illustration, spens, pencils, rubbers, stones, books etc.	A NEW MK PRIMARY MTC BK 5 PAGE	

3	ALGEBRA	ALGEBRA	FORMING ALGEBRAIC EXPRESSIONS	Critical thinking and problem solving	The Learner:  1. Uses alphabetical letters to help in forming algebraic expression  2. Forms simple equations from given algebraic expressions.	Read words correctly. Writes BODMAS in full.	FORMING ALGEBRAIC EXPRESSIONS  Examples i) 4 more less than a $= \frac{a+4}{1}$ ii) x less than 12 $= \frac{12-x}{1}$ iii) A number added to 10 $= \frac{10+n}{1}$	<ul><li>Discovery</li><li>discussion</li></ul>	Collecting like terms	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 270
4	ALGEBRA	#CR ALGEBRA	E NUMBERS	Critical Addition P and problem solving	The Learner:  2. Solves numbers involving substitution.  3. Expands given expressions before substituting.	meaning of substitute  Expansion.	SUBSTITUTION OF Example 7856  If a = 3, b = 4; Find: i) a + b = 3 + 4 = 7  ii) 2a + 5b = 2 x a + 5 x b = 2 x 3 + 5 x 4 = 6 + 20 = 26	• Dscovery • Dscussion	Solving Frozlems involving substitution	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 271
5	ALGEBRA	ALGEBRA	SOLVINGEQUATIONS BY	Critical thinking and problem solving	The Learner:  1. Collects like terms correctly.  2. Uses the inverse operation to eliminate the unwanted number from either sides of an equation  3. Solves for the unknown.	Collecting like terms.  Reading mathematical statements.	SOLVING EQUATIONS BY SUBTRACTION Example n + 7 = 13 n + 7 - 7 = 13 - 7 n = 13 - 7 n = 6	<ul><li>Discussion</li><li>Explanation.</li></ul>	Solving simple equations of one variable.	Chalkboard illustration, pens, pencils, rubbers, etc.	A NEW MK PRIMARY MTC BK 5 PAGE 272

3	1	ALGEBRA	ALGEBRA		The learner:  1. Derives equations from given word problems.
	2	ALGEBRA	ALGEBRA	ADDITION	#CREATIVE PRINTERS 0703745068/ 0785681207
	3	ALGEBRA	ALGEBRA		#CREATIVE PRINTERS 0703745068/ 0785681207

					Critical	The learner:	Read	SOLVING MIXED	• •	solving	Ω	B A X Z	
	4	ALGEBRA	ALGEBRA	SOLVING MIXED EQUATIONS	thinking and problem solving	<ol> <li>Collects like terms correctly.</li> <li>Uses the inverse operation to eliminate the unwanted number from either sides of an equation</li> <li>Solves for the unknown.</li> </ol>	mathematical statements involving algebra. Collecting like terms.	EQUATIONS Example 8a + 4 = 3a + 14 8a - 3a + 4 = 3a - 3a + 4 5a + 4 = 14 5a + 4 - 4 = 14 - 4 5a = 10 5a = 10 5a = 40 <sup>2</sup> 5 5 a = 2	Discovery Discussion	simple problems involving algebra.	Chalkboard illustration.	NEW MK PRIMARY MTC < 5 PAGE 279	
	5	ALGEBRA	AREBRA	E DIVIDING	Critical thin King P and problem solving	The learner: RINT See No 7  unknown in the given equation by dividing.  2. Forms equations from a given text and solve for the un known.	Read statements involving algebra.  Cross multiplication.	508/NG 78568 EQUATIONS BY DIVIDING Example Solve: 5a = 20 5a = 20 5 5 5 a = 4	C. discussion	solving Griple problems involving algebra.	Chalkboard illustration.	A NEW MK PRIMARY MTC BK 5 PAGE 276 – 278	
4	1	ALGEBRA	ALGEBRA	SOLVING EQUATIONS WITH FRACTIONS	Critical thinking and problem solving	<ol> <li>The learner:</li> <li>Solves equations involving fractions using the LCM.</li> <li>Derives equations from given word problems.</li> <li>Solves equations involving fractions in word problems.</li> </ol>	Read mathematical statements involving algebra. Cross multiplication.	SOLVING EQUATIONS WITH FRACTIONS Example Solve: $\underline{x} = 4$ $3$ $\underline{x} = \frac{4}{1}$ $3 \times \underline{x} = 4 \times 3$ $3  1$ $x = 4 \times 3$ $x = 12$	Class discussion.	solving simple problems involving algebra.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 282 –	

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2	ALGEBRA	ALGEBRA	APPLICATION OF ALGEBR AT AREA, PERIMETER AND VOLUME	Critical thinking and problem solving	<ol> <li>The learner:         <ol> <li>Defines perimeter is.</li> <li>State the formulae of finding perimeter of different figures.</li> <li>Derives an equation in order to solve the value of the required side of any shape.</li> </ol> </li> <li>Solves for the unknown side of a figure by substituting correctly.</li> </ol>	Meaning of perimeter.  Formula used to find perimeter.	i) Explanation of perimeter. ii) Formulae for finding perimeters of different figures.  Example The perimeter of a square is 36cm. Find its  P=36  s+s+s+s=36 4s=36   s=9cm 4 4   one side is 9cm	<ul><li>Excursion</li><li>Discussion</li></ul>	i)Forming algebraic expression s. ii) solving simple problems involving algebra.	The school playground, assembly ground, etc. chalkboard illustration.	A NEW MK PRIMARY MTC BK 5 PAGE284 - 285	
3	ALGEBRA	ALGEBRA	APPLICATIO OF ALGEBRA IN AREA, PERIMETER AND	Critical thinking and problem solving	<ol> <li>The learner:         <ol> <li>Gives the formula of area of a rectangle, square and triangle.</li> <li>Derives an equation in order to solve the value of the required side of any shape.</li> <li>Solves for the unknown side by involving substitution.</li> </ol> </li> <li>Solves for the unknown side of a figure in given word problems.</li> </ol>	Meaning of area.  Formula used to find area.	AREA Example The area of a rectangle below is $32\text{cm}^2$ . And its length is 8cm, find its base. Sketch $A = 32\text{cm}^2$ $8\text{cm}$ Area = $1 \times \text{w}$ $32 = 8 \times \text{w}$ $32 = 8 \text{w}$ $.8\text{w} = 32$ $8$ w = 4cm	Class discussion	i)Forming algebraic expression s. ii) solving simple problems involving algebra.	Chalkboard illustration.	A NEW MK PRIMARY MTC BK 5 PAGE 286	

	4	ALGEBRA	ALGEBRA	APPLICATIO OF ALGEBRA IN AREA, PERIMETER AND VOLUME	Critical thinking and problem solving	The Learner:  1. States the formula for finding volume.  2. Applies substitution to aid in solving for the unknown side of a cuboid.  3. Derives an equation in order to solve the value of the required side of the cuboid  4. Solves for the unknown side of a cuboid	Meaning of volume.  Formula used to find volume.	VOLUME Example The volume of a box is $60 \text{cm}^3$ . Its length is 5cm and the width is 4cm. Find its length.  Sketch $V = 60 \text{cm}^3$ $= 4 \text{cm}$ $L = 8 \text{cm}$ $I \times w \times h = \text{volume}$ $5 \times 4 \times h = 60$ $20 + 60 = 60$ $20 + 60 = 20$ $= 3 \text{cm}$	Class discussion	i)Forming algebraic expression s. ii) solving simple problems involving algebra.	Boxes of different sizes, chalkboard illustration.	A NEW MK PRIMARY MTC BK 5 PAGE 287	
	5	NUMERACY	NUMBER PATTERNS AND SECULENCES	MULTIPLES OF WHOLE NUMBERS	Critical and Creative thinking	<ol> <li>The learner:</li> <li>Works out the multiples of given numbers.</li> <li>Works out the multiples of a required range of numbers.</li> </ol>	Meaning of Multiples of numbers	MULTIPLES OF WHOLE NUMBERS Example Multiples of 5 = (1 x 5),(2 x 5),(3 x 5). = 5, 10, 15, M5 = {5, 10, 15, 20, 25,}	Class discussion Rote	Listing multiples of numbers.		A NEW MK PRIMARY MTC BK	
5	1	NUMERACY	NUMBER PATTERNS AND SEQUENCES	FACTORS AND COMMON FACTORS OF NUMBERS	Critical and Creative thinking	The learner: 1. Defines a factor. 2. Write factor of a number in short. 3. Works out the factors of a given numbers by carrying out simple multiplication. 4. Finds the greatest and lowest common factors of given numbers.	Meaning of factors  Meaning of common factors.	FACTORS OF NUMBERS AND COMMON FACTORS. A factor is a number that divides another in an exact number of items. Example Find the factors of 12. $F_{12}$ . = 1 x 12 = 12 = 2 x 6 = 12 = 3 x 4 = 12 $F_{12}$ = {1, 2, 3, 4, 12}	Class discussion Rote	Listing factors of numbers.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 81 – 82	

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2	NUMERACY	NUMBER PATTERNS AND SEQUENCES	TYPES OF NUMBERS	Critical and Creative thinking	<ol> <li>The learner:</li> <li>Names some types of numbers.</li> <li>Gives examples of each type of numbers.</li> <li>Uses the knowledge of types of numbers to solve problems related to number pattern and sequence</li> </ol>	Name the types of numbers from the number pattern.	Example Odd numbers Even numbers Whole numbers Counting numbers	Class discussion	Identifying and listing the types of numbers.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 83 & 91	
3	NUMERACY	NUMBER PATTERNS AND SEQUENCES	PRIME AND COMPOSITE NUMBERS	Critical and Creative thinking	<ol> <li>The learner:</li> <li>Defines prime numbers.</li> <li>Gives examples of prime numbers.</li> <li>Defines composite numbers.</li> <li>Gives examples of composite numbers.</li> <li>Determines whether a number is or composite by prime factorising.</li> </ol>	Meaning of Prime numbers.  Meaning of composite numbers.	PRIME AND COMPOSITE NUMBERS a) Prime numbers are numbers with two factors. b) Composite numbers are numbers are numbers with more than two factors.	Class discussion	Identifying and listing the types of numbers.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 83	
4	NUMERACY	NUMBER PATTERNS AND SEQUENCES	PRIME FACTORISATION LISING A FACTOR	Critical and Creative thinking	The learner:  1. Lists the numbers used when factorising.  2. Primes factorise by tree method.  3. Presents the prime factors in multiplication and notation (subscript) form.	Meaning of prime factorisation.  Prime numbers.	PRIME FACTORISATION USING A FACTOR TREE. Example Prime factorise 12  PF12 = {2 x 2 x 3}or PF 12 = {21, 22, 31}	Class discussion	Listing factors of numbers.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 84	

5	NUMERACY	NUMBER PATTERNS AND SEQUENCES	PRIME FACTORISATION USING A LADDER AND LCM	Problem- solving	The Learner:  1. Prime factorises given numbers of together using the ladder.  2. Multiplies the prime factors to get the LCM.	Describe what LCM is.	USING A LADDER.  Example  Prime factorise 216    FF	Class discussion	Finding the LCM of numbers.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 85	
		NUMB AND S		Problem- solving	The learner:  1. States what a square number is.	Meaning of a square number.					мтс в	

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Calculates the

6

Solves word problems involving square numbers.

 $5^2 = 5 \times 5$ = 25

The square of 5 is 25

6	2	NUMERACY	NUMBER PATTERNS AND SEQUENCES	SQUARE ROOTS OF NUMBERS	Problem- solving	<ol> <li>The learner:         <ol> <li>States what a square root is.</li> <li>Finds the square roots of given square numbers.</li> <li>Solves word problems involving square roots.</li> </ol> </li> <li>Works out the side of a square using the square root knowledge.</li> </ol>	Meaning of a square root.	SQUARE ROOTS OF NUMBERS A square root is a number that is multiplied by itself to get a square number.  3 x 3 = 9  Square Find the square root of 25  5 25 5 5 1  √25 = (5 x 5) = 5	Class discussion	Uing the types of numbers to form and solve patterns	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 89	
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	3	NUMERACY	NUMBER PATTERNS AND SEQUENCES	TRIANGIULAR NUMBERS	Problem- solving	The learner:  1. States what triangular numbers mean.  2. Forms patterns of triangular numbers.	Description of triangular numbers.	TRIANGIULAR NUMBERS These are numbers when whose dot are arranged form a triangular pattern Example  1 3 6 10 15 Adding consecutive numbers starting from 1 can get triangular numbers.	Class discussion	Uing the types of numbers to form and solve patterns	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 90	
6	4	NUMERACY	NUMBER PATTERNS AND SEQUENCES	OPERATION ON PATTERNS AND SECULENCES	Problem- solving	The learner: Uses the operations to find the next or missing number in a given sequence	Write and describe the next number in the sequence.	OPERATION ON PATTERNS AND SEQUENCES  Example What is the next number in the sequence?  1, 4, 7, 10, 13	Class discussion	Uing the types of numbers to form and solve patterns	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 92	
	5	NUMERACY	FRACTIONS	EXPRESSING IMPROPRE FRACTIONS AS MIXED FRACTIONS	Effective communica tion and problem solving	The Learner:  1. States what a fraction is.  2. Names the parts of a fraction.  3. Names the types of a fraction.  4. Describes each type of fraction  5. Gives examples of each type of fraction.  6. Expresses improper fraction as a mixed fraction	i) Defining fractions ii) Expressing improper fractions as mixed fractions	FRACTIONS A fraction is part of a whole PARTS OF A FRACTION Numerator and denominator TYPES OF FRACTIONS a) Proper fractions b) Improper fractions. c) Mixed fractions EXPRESSING IMPROPER AS MIXED FRACTION Example Express 9/5 as a fraction. 9 ÷ 5 = 1 rem. 4 = 14/5	<ul><li>Demonstration</li><li>Discussion</li></ul>	Writing definitions of fractions.	Chalkboard illustration, oranges etc.	A NEW MK PRIMARY MTC BK 5 PAGE 115 – 116	

7	1	NUMERACY	FRACTIONS	MIXED FRACTIONS AS IMPROPER	Effective communica tion and problem solving	The Learner: Expresses mixed fraction as improper fraction.	i) Expressing improper fractions as mixed fractions ii) Expressing mixed fractions as improper fractions	MIXED FRACTIONS  AS IMPROPER  Example  Express $4^2/_3$ as an improper fraction $4^2/_3 = \frac{W \times D + N}{D}$ $= \frac{4 \times 3 + 2}{3}$ $= \frac{12 + 2}{3}$ $4^2/_3 = \frac{14}{3}$	Class discussion	Expressing mixed fractions to improper fractions.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 116	
	2	NUMERACY	FRACTIONS	EQUIVALENT FRACTION	Effective communica tion and problem solving	Learner: 1. Represents equivalent fractions diagrammatically. 2. Works out equivalent fractions by calculation.	Finding eqivalent fractions	EQUIVALENT FRACTION  Diagrammatic representation of equivalent fractions $1/2 = 1/2$ $2/4 = 1/2$ $3/6 = 1/2$ Equivalent fractions by calculation Example Write four fractions equivalent to $1/2$ $1/2 = 1x2$ , $1x3$ , $1 \times 4$ , $1 \times 5$ $1/2 = 2/4$ , $3/6$ , $4/8$ , $5/1$ 0	Class discussion	Finding equivalent fractions	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 117	
	3	NUMERACY	FRACTIONS	REDUCING FRACTIONS	Effective communica tion and problem solving	The learner:  1. Derives common factors of given parts of a fraction.  2. Uses the GCF to reduce the given fraction	Reducing fractions	REDUCING FRACTIONS Example Reduce $^{12}/_{24}$ to its simplest term $F_{12} = \{1, 2, 3, 4, 6, 12\}$ $F_{24} = \{1, 2, 3, 4, 6, 8, 12, 24\}$ $CF = \{1, 2, 3, 4, 6, 12\}$ GCF = 12 $\frac{12}{2} \div 12$ $\frac{12}{2} \div 12$ $\frac{1}{2} \div 12$	Class discussion	Reducing fractions using GCF.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 118	

8	4	NUMERACY	FRACTIONS	ORDERING FRACTIONS	Effective communica tion and problem solving	The learner:  1. States the meaning of arrange.  2. Defines ascending.  3. Defines descending.  4. Uses LCM to determine the size of a fraction.  5. Arranges the fractions in the required order.	Ordering fractions use LCM as a determinant	ORDERING FRACTIONS To arrange fractions is to arrange fractions in ascending or descending order.  Example Arrange $^{1}/_{3}$ , $^{1}/_{2}$ , $^{1}/_{4}$ in a) Ascending order.  b) Descending order.  LCM of 2, 3 and 4 = 12 $^{1}/_{3}$ , x 12 = 4 $^{1}/_{3}$ , x 12 = 4 $^{1}/_{3}$ , x 12 = 3 $^{1}/_{4}$ x 12 = 3 $^{1}/_{4}$ , $^{1}/_$	Class discussion	Ordering fractions using the LCM.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 119 – 120	
	5	NUMERACY	FRACTIONS	ADDITION OF WHOLES TO FRACTIONS	Effective communica tion and problem solving	<ol> <li>Carries out addition of whole numbers to fractions.</li> <li>Adds wholes alone and later the fraction.</li> </ol>	Addition of fractions with whole numbers.	ADDITION OF WHOLES TO FRACTIONS  Example $\frac{3}{4} + 5 = 5 + \frac{3}{4} = 5 \frac{3}{4}$ Example II $\frac{3^{2}}{5} + 7 = 3 + 7 + \frac{2}{5} = 10 + \frac{2}{5} = 10^{2}/5$	Class discussion	Addition of fractions with a whole numbers.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 122	
9	1	NUMERACY	FRACTIONS	ADDITION OF SIMPLE FRACTIONS	Effective communic ation and problem solving	The learner:  1. Adds simple fractions using the LCM.  2. Changes mixed fractions to improper fractions before adding the fractions  3. Reduces the fractions to simpler terms.	Addition of fractions with fractions	ADDITION OF FRACTIONS  Example Add: $\frac{1}{4} + \frac{1}{2}$ LCM of 2 and 4 = 4 = 1 + 2 4 = $\frac{3}{4}$ .	Class discussion	Addition of fractions with different denominat ors	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 121-	

2	NUMERACY	FRACTIONS	WORD PROBLEMS IN ADDITION OF FRACTIONS	Effective communica tion and problem solving	The Learner:  1. Solves word problems involving addition of fractions  2. Changes mixed fractions to improper fractions before adding the fractions  3. Reduces the fractions or change it to mixed fractions	i)Reading and interprets word ii)Addition of fractions with fractions problems.  TIVE PI 81207	WORD PROBLEMS IN ADDITION OF FRACTIONS Example John filled ½ a tank with water in the meming and 2/5 m he afternoon. what fraction of the tank was full of water? $\frac{1}{2} + \frac{2}{5}$ LCM of 2 and 5 = 10 = $5 + 4$ 10 = $\frac{9}{10}$ . The tank was filled with $\frac{9}{10}$	Class discussio	Subtraction of fractions with different denomina.	Chalkboard illustration, oranges.	A NEW MK PRIMARY MTC BK 5 PAGE 125	
3	NUMERACY	FRACTIONS	SUBTRACTION OF FRACTIONS	Effective communica tion and problem solving	The learner:  1. Subtracts simple fractions using the LCM.  2. Changes mixed fractions to improper fractions before adding the fractions  3. Reduces the fractions to simpler terms or change improper fraction to mixed fraction	Subtraction of fractions with different different denominators	SUBTRACTION OF FRACTIONS Example $\frac{1}{2} - \frac{1}{3}$ LCM of 2 and 3 = 6 = 3 - 2 6 = $\frac{1}{6}$ Example II $5 - \frac{2^{5}}{1^{2}}$ = $\frac{5}{1} - \frac{2^{9}}{1^{2}}$ LCM = 12 = $\frac{60 - 29}{12}$ = $\frac{31}{12}$ = $\frac{2^{7}}{12^{2}}$	Class discussion	Subtraction of fractions with different denominat	Chalkboard illustration, oranges	Chalkboard illustration, oranges.	Chalkboard illustration

9		NUMERACY	FRACTIONS	Critical thinking and problem solving	The learner:  1. Solves word problems involving subtraction of fractions	Subtraction of fractions with different different denominators	WORD PROBLEMS IN SUBTARACTION OF FRACTIONS Example A baby was given 5/6litres of milk and		5 PAGE 127
	4	#CF	REATI	VE PRI	NTERS 070	3 <b>74506</b> 8	8/ <b>07</b> 85681	207	
	5				Reduces the fractions				
10	1	NUMERACY	MULTIPLICATION OF FRACTIONS FRACTIONS	Effective communica tion and problem solving	The learners:	Reading and solving problems involving multiplication of fractions by whole nbers.	MULTIPLICATION OF FRACTIONS Example I $\frac{1}{4} \times 3$ = $\frac{1}{4} \times \frac{3}{1}$ . = $\frac{1 \times 3}{4 \times 1}$ = $\frac{3}{4}$ Example II $\frac{1}{2}$ of 16 'of' becomes $x$ = $\frac{1}{2} \times 16$ = $\frac{1}{2} \times 16$ = $\frac{1}{2} \times 16$ = $\frac{1 \times 16}{1}$ Reduce 2 × 1 2 = 8	Class discussion	A NEW MK PRIMARY MTC BK 5 PAGE 129 – 130 Chalkboard illustration

10	2	NUMERACY		WORD PROBLEMS INMULTIPLICATION OF FRACTIONS	Effective communica tion and problem solving	The learner:  1. Solves word problems involving multiplication of fractions  2. Changes mixed fractions to improper fractions before adding the fractions  3. Reduces the fractions to simpler terms or change it to mixed fractions	Reading and solving problems involving multiplication of fractions by whole nbers.	WORD PROBLEMS IN MULTIPLICATION OF FRACTIONS Example  A mathematics book contains 200 pages. A pupil reads $^{3}/_{5}$ of the book. How many pages did the pupil read?  A pupil reads $^{3}/_{5}$ of 200 pages. $= ^{3}/_{5}$ of 200 pages $= ^{3}/_{5}$ x $^{200}/_{1}$ . Pages $= ^{3}/_{5}$ x 1 $= ^{3}/_{5}$ x 40 $ ^{1}/_{5}$ x 1	Class discussion		Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 131 - 132
	3	NUMERACY	FRACTIONS	# OF FRACTION	communica tion and problem solving	1. Give the reciprocal of a fraction given. 2. Give reciprocals of whole numbers.	Reading and solving problems involving multiplication of fractions by whole nbers.	FRACTION Example a) The recip. of $6 = {}^6/_1$ b) The recip. of ${}^2/_3 = {}^3/_2$ c) The recip. of ${}^1/_2 = {}^2/_3$	Class discussion	tion of fractions by fractions.		A NEW MK PRIMARY MTC
	4	NUMERACY	FRACTIONS	RECIPROCAL BY CALCULATION	Effective communica tion and problem solving	<ol> <li>The learner:</li> <li>States the         <ul> <li>underlying principle of when a fraction is multiplied by its reciprocal, the answer is always 1.</li> </ul> </li> <li>Works out the reciprocal of a fraction.</li> <li>Solves related problems involving reciprocals</li> </ol>	Reading and solving problems involving multiplication of fractions by whole numbers.	RECIPROCAL BY CALCULATION  We should take note that a number multiplied by its reciprocal gives 1  Example  What is the reciprocal of ${}^{3}/_{5}$ ?  Let the recip. be y ${}^{3}/_{5}$ x y = 1	Class discussion	Multiplicati on of fractions by fractions.	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE

	5	NUMERACY	FRACTIONS	DIVISION OF FRACTIONS	Effective communica tion and problem solving	The learner:  1. Carries out division of fractions making necessary changes involving use of reciprocal.  2. Simplifies the fractions by canceling using the common factors.	Reading and solving problems involving division of fractions	DIVISION OF FRACTIONS  Example I Divide: $\frac{1}{5} \div 4$ $= \frac{1}{5} \div \frac{4}{1}$ $= \frac{1}{5} \times \frac{1}{4}$ $= \frac{1}{5} \times 4$ $= \frac{1}{20}$	Class discussion	Division of fractions by whole numbers	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 134 -	
11	1	NUMERACY	FRACTIONS	EXPRESSING FRACTIONS AS DECIMAL FRACTIONS	Effective communica tion and problem solving	<ol> <li>The learner:         <ol> <li>Describes decimal places.</li> <li>Converts fractions whose denominators are multiples of ten to decimal fractions.</li> <li>Uses the number of zeros a denominator has to determine the number of decimal places.</li> <li>Expresses mixed fractions as decimals by changing the mixed fraction to an improper fraction first.</li> </ol> </li> </ol>	Reading and solving problems involving division of fractions	EXPRESSING FRACTIONS ASDECIMAL FRACTIONS  Example a) Write <sup>25</sup> / <sub>10</sub> as a decimal fraction  25/ <sub>10</sub> = 2.5 (1 zero 1 dec. place) b) Write <sup>25</sup> / <sub>100</sub> as a dec. fraction  25/ <sub>100</sub> = 0.25 (2 zeros, 2 dec. places)	Class discussion	Converting fractions to decimals	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 141 - 142	
	2	NUMERACY	FRACTIONS	CHANGING DECIMALS TO FRACTIONS	Effective communica tion and problem solving	The learner:  1. Uses the number of decimal places to determine the denominators.  2. Converts decimals to common fractions.  3. Reduces fractions where necessary.	Reading and solving problems involving division of fractions ersa	CHANGING DECIMALS TO FRACTIONS  Example Express 6.9 as a common fraction. $6.9 = {}^{69}/_{10}$ .(1 dec. place gives 1 zero on the denominator). $= {}^{69}/_{10}$ . Change to mixed. $= {}^{69}/_{10}$	Class discussion	Converting decimals to fractions and vice	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 143	

3	NUMERACY	FRACTIONS	ORDERING FRACTIONS	Effective communica tion and problem solving	<ol> <li>Changes the given set of decimal fractions to common fractions first.</li> <li>Calculates the size of each fraction by using the LCM.</li> <li>Arranges the decimals from the smallest to the highest and vise versa.</li> </ol>	Reads aloud and solve problems involving decimals	ORDERING DECIMAL FRACTIONS Example Arrange from smallest to biggest. 0.1, 1.1, 0.11 $= \frac{1}{10}, \frac{11}{10}, \frac{11}{100}$ $= \frac{1}{10} \times 100 = 10$ $= \frac{1}{10} \times 100 = 11$ $= 11 \times 100 = 11$ $= 11 \times 100 = 11$ $= 100$ $= \frac{\text{From smallest} = 0.1, 0.11, 1.1$ $= \frac{1}{10}$ Example II Which is smaller than the other? 0.2 or 0.1 Use < or >. $= \frac{2}{10}, \frac{1}{10}.$ $= \frac{2}{10} \times 10 = 2$ $= \frac{1}{10} \times 10 = 1$	Class discussion	Ordering fractions using the LCM	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 145 – 146	
4	NUMERACY	FRACTIONS	ADDITION OF DECIMAL FRACTIONS	Critical thinking and problem solving	The learner:  1. Arranges the decimals vertically considering decimal points in line.  2. Creates decimal places to keep place value.	Reads aloud and solve problems involving addition of decimals.	0.2 > 0.1  ADDITION OF DECIMAL FRACTIONS  Example. Add: 14.9 + 8.02 + 36.48 14.90 8.02 + 36.48 59.40	Class discussion	Finding place values of decimals. Adding decimals	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 147	

	5	NUMERACY	FRACTIONS	SUTRACTION OF DECIMAL FRACTIONS	Effective communica tion and problem solving	The learner:  1. Balances up the decimal places before actually subtracting.  2. Arranges the decimals vertically putting the points in line.	Reads aloud and solve problems involving subtraction of decimals.	SUTRACTION OF DECIMAL FRACTIONS  Example Subtract: 97.4 – 13.69 97 . 40 - 13 . 69 83 . 71	Class discussion	Subtracting decimals. With decimals	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 147	
12	1	NUMERACY	FRACTIONS	ADDITION AND SUBTRACTION OF DECIMALS	Effective communica tion and problem solving	The learner:  1. Uses BODMAS to re-arrange the expression starting with the addition first.  2. Arranges the numbers vertically when solving the given problem maintaining the points in line.	Reads aloud and solve problems involving subtraction and addition of decimals.	ADDITION AND SUBTRACTION OF DECIMALS  Example. Work out: 13.7 – 27 + 91.25 Collect positive terms first. = 13.75 + 91.25 – 27 (First add) = 13.75 + 91.25 105.00 - 27.00 78.00	Class discussion	Adding and subtracting decimals using BODMAS	Chalkboard illustration	A NEW MK PRIMARY MTC BK 5 PAGE 148	

## **P.5 MTC SCHEMES OF WORK TERM THREE**

WK	PD	THM	TPC	S/TP	L/SKL	COMPETE		CONTENT	METH	A CIT	L/AID	REF	RE
VVI	PD	ILIM	IPC	3/17	L/SKL			CONTENT	INIEIU	ACT	L/AID	KEF	KE
2	1 & 2	Graphs	Pictographs	TABLES	Critical thinking and problem solving	SUBJECT  The leaner:  1. Represents and interpret the information on the control of the control	The leaner:  1. Reads the involved vocabularie  ressorr correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	PICTOGRAPH Information is represented in pictorial form. It always has a title and scale.  PLANTERS 07037  Study the pictograph below and answer the questions that follow.  Number of pupils who scored different grades:  (Refer to Pictograph in notes pg.1) a) How many sat for the test? b) How many are in excellent grade?  Exc = 2 ½  @ star = 10 pupils 2 ½ = 5/ 2 x 10.5 = 25 pupils.	Demonstr ation Discussio n	Drawing a pictograph Learners will do Percise A in the lesson notes.	Mk text books Real objects e.g. pens	New Mk Bk. 5 Page	07
2	3 & 4	Graphs	Tables	TABLES	Critical thinking and Problem solving.	The leaner: Answers questions about the table.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularies correctly.	READING AND INTERPRETING TABLES  Example: A farmer recorded the number of pineapples he harvested each month as shown in the table below;  Month J F M A M J  Ppls 420 360 330 380 400 480  1. Highest number of pineapples was harvested in June. 2. The lowest harvest was in June. 3. The difference between the highest and the lowest was; 480 – 330 = 150. d) The sum of all pineapples Harvested was 2370.	Discovery Discussio n Observati on	Learner's participati on in class discussion . Learners will do exercise A2 in the lesson notes	Chalkboard illustration	Mk 2000 (new) Bk. 5 Pg 218– 219	

2	5 & 6	Graphs	Drawing tables	Tables	Critical thinking and problem solving.	The leaner:  1. Draws tables and represent the information given  2. Solves problems related to the table.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	DRAWING AND INTERPRETING TABLES Example A farmer collected 20eggs on Monday, 25 on Tuesday, 15 on Wednesday, 30 on Thursday and 25 on Friday. Draw a table to represent the above information.  Day Mon. Tue Wed. Thur. Fri Eggs 20 25 15 30 25  Questions. On which day was the highest number of eggs collected? Etc.	Discovery Discussio n Observati on	Learner's participati on in class discussion . Learners will do Exercise A3 in Lesson notes.	Chalkboard	Mk 2000 (new) Bk. 5 Page22 0 – 221	
2	8	Graphs	Bar graphs	Drawing bar graphs	Drawing and problem solving.	The leaner:  1. Names the features of a bar graph.  REMASTIVE problems related to the bar graph.	The leaner:  1. Reads the involved vocabularie  The leason correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	BAR GRAPH: Features of a bar graph Title Vertical axis (Refer to the graph in notes pg.4) Interpretation of a bar graph Example: (Refer to the graph in notes pg.4) On which day were more eggs collected? etc	Discovery Guided discussion	Interpretin g a bar graph by ider by features of a bar graph. Learners will do exercise A4	Chalkboard illustration. A chart showing a bar	New Mk 2000 Bk. 5 - 223	

2	9 &	Graphs	Drawing and 1. Represents the 1. Rear information on the bar graph. 2. Draws a bar graph using a scale.	Example:       discussion       Image: section of the property of the proper
3	2	Graphs	Recording in the vocabular s correctly	e e

	3				Pecording	The leaner:	The leaner:	BAR LINE CRAPH					
	3 & 4		graph		Recording In computer and problem solving	The leaner:  Deplement of the problems related to the bar graph.	The leaner:  I Fig. 5 ea O  involved  vocabularie  s in the  lesson  correctly in  correct  intonation	BAR LINE GRAPH  TIGGRAPH  TO THE GRAPH  THE GRAPH  The graphs bellow show the age and weight of five pupils;  A: Age of pupils  Refer to the graph and table in notes pg.9)  B: Weight of pupils;	Super S discussion Discovery	Interposition of the property	Chalkboard illustration Chart of a bar line graph	Mk 2000 (new) Bk. 5 Pg 229– 230	
		Graphs	Bar line graph	Drawing bar line graphs			and pronunciati on.  2. Spells the vocabularie s correctly.	Refer to the graph and table in notes pg.9) A: Name the pupils with same age. How old is the youngest pupil? How old is Aisha? Who is 10 years old? Etc. B: How heavy is Ronald? Name the pupils with same weight. How much heavier is Hakim than Ronald? Etc.		lesson notes	00		
3	5 & 6	GRAPHS	Bar line graphs	Drawing bar line graph	Critical thinking and problem solving	The leaner:  1. Draws bar line graphs using the information in the table.  2. Solves problems related to the bar graph.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	DRAWING BAR LINE GRAPHS USING INFORMATION IN TABLES Example: A driver recorded the amount o fuel he used through out the week  Day M T W T F Amount 10 20 25 15 5  Bar line graph  Refer to the graph in notes pg.11) Which day did he use least amount of fuel? etc	Demonstr ation Guided discussion	Drawing bar line graphs Solving problems related to bar line graphs. Learners will do exercise A8 in the lesson notes	Chalkboard illustration	Mk 2000 (new) Bk. 5 Page23 0	

3	7 & 8	MEASURERS	TENPERATURE	READING TEMPERATURE	Effective communicati on and problem solving	The leaner: 1. Defines temperature. 2. Names the instruments used to measure temperature. 3. Names the units for measuring temperature. 4. Solves problems related to temperature by subtraction.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	MEASURING TEMPERATURE  Definition of temperature; An instrument used to measure temperature Units used to measure temperature (	Discussio n Observati on	-Solving some numbers related to temperatu re Discussin g work on page 233 of new Mk Bk. 5Learners will do exercise B1 in the lesson notes	Chalkboard illustration New Mk text books	Mk 2000 (new) Bk. 5 Pg 233– 234	
3	9	Measures	Temperature	Reading maximum and minimum temperature.	Effective communicati on and problem solving.	The leaner:  1. Reads the maximum and minimum temperature.  2. Solves problems related to maximum and minimum temperature.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	READING MAXIMUM AND MINIMUM TEMPERATURE  Example: Study the maximum and minimum thermometer below; Refer to the thermometer in notes pg.13) Maximum Temp. = $40^{\circ}$ c Minimum Temp. = $-20^{\circ}$ c Difference between max. & Min. temp. = $40^{\circ}$ - $20^{\circ}$ = $40 + 20$ = $60^{\circ}$	Discussio n Oral questionin g and answer.	-Drawing thermomet ers and reading temperatu re on themLearners will do exercise B2 in the lesson notes	Chalkboard	New Mk 2000 Bk. 5 Pg 235 - 226	

3	10	Measures	TEMPERATURE	MAXIMUM AND MINIMUM TEMPERATURE	Critical thinking and problem solving	1. The leaner: 2. Draws a bar graph to represent the maximum and minimum temperature. 3. Interprets the temperature graph. 4. Solves simple problems related to the temperature graphs.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	DRAWING AND INTERPRETING A BAR GRAPH TO REPRESENT MAXIMUM AND MINIMUM TEMP.  Example Draw a bar graph to represent the maximum and minimum temp. below  Time 10pm 11pm 12midnight Max. 5 10 10 Min. 10 20 15  Refer to the graph in notes pg.14)	Guided discussion	-Drawing bar graphs from given rates of temperatu reLearners will do exercise B3 in the lesson notes.	Chart of an illustr ated drawi ng of a bar graph	Mk 2000 (new) Bk. 5 Page 236
4	1 & 2	MEASURES	MONEY	BUYING AND SELLIND (Profit)	Critical thinking and problem solving	The leaner: 1. Applies formula for finding profit. 2. Calculates profit for a given business transaction.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	BUYING AND SELLING.  PROFIT  PROFIT = Selling price – Buying Price Or  P = SP – CP (BP)  Example John bought a bucket for 2000/= and sold it at 2,400/=. Find his profit.  Cost price = 2,000/= Selling price = 2,400/=  Profit = SP – CP = 2,400 – 2,000 = 400/= Profit = 400/=	Guided discussion Use of examples	Learners will do exercise B4 in the lesson notes	Coins of 500, 200, 100, 50.	Mk 2000 (new) Bk. 5 Page 245

4	3 & 4	MEASURES	MONEY	BUYING AND SELLING (LOSS)	Critical thinking and problem solving	The leaner:  1. Applies the formula of finding loss.  2. Calculates loss in a given transaction.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	LOSS Loss = Cost price –Selling Price Or = CP – SP Example The cost of a radio is sh. 100,000 If it is sold at sh 80,000, Find the loss made? Loss = cost prise – selling price = PC – SP = 100,000 – 80,000 = 20,000 Loss = sh. 20,000.	Guided discussion	Tr./ Pupils participati on in the lesson. Learners will do exercise B5 in the lesson notes	Chalk board illustr ation	Mk 2000 (new) Bk. 5 Page 245
4	5 & 6	MESURES	MONEY	FINDING COSTPRICE	Critical thinking an d problem solving.	The leaner:  1. Applies the formula for finding the cost price when profit and selling g price are given.  2. Calculates cost price in a given business transaction.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	FINDING COST PRICE WHEN PROFIT AND SP ARE GIVEN  Example Kitanda sold a cow at sh. 225,000 and made a profit of sh. 35,000. What was his cost price? Cost price = SP - Profit = 225,000 - 35,000 = 190,000 Cost price = sh. 190,000	Guided discussion	Learners will do exercise B6 & B7 in the lesson notes	Chalk board illustr ation	Mk 2000 (new) Bk. 5 Page 246
4	7 & 8	MESURES	MONEY	FINDING SELLING PRICE WHEN PROFIT OR LOSS IS GIVEN	Critical thinking and problem solving.	The leaner:  1. Applies the formula of finding selling price when profit and loss are given.  2. Calculates selling price in a given business transaction.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	SELLING PRICE WHEN PROFIT/LOSS IS GIVEN.  Example A trader bought a shirt at sh. 7,500. She sold it and made a profit of sh. 3,500. What was her selling price?  SP = Buying price + Profit = 7,500 + 3,500 = 11,000 She sold it at sh. 11,000	Guided discussion	Learners will do exercise B8 & B9 in the lesson notes	Chalk board illustr ation	Mk 2000 (new) Bk. 5 Page 247

4	9	MEASURES	RATES	SIMPEL RATE 1	Critical thinking and problem solving.	The leaner: Finds the simple rates and proportions in a given business transaction.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati	SIMPLE RATES I  Example A book costs sh.500. What is the cost of 3 similar books?  1 book = sh500 3books= (3 x 500) Sh. = sh. 1,500  3 books = sh. 1,500	Discussio n Demonstr ation of shopping.	Learner/ Tr. participati on in the lesson. Learners will do exercise B10 in the lesson notes	Chalk board illustr ation	New Mk mtc pg 238	
4	10	MEASURES	SIMPLE RATES SIMPLE RATES	SIMPLE RATE II.	Critical thinking and problem solving.	The leaner: Finds the simple rates and proportions in a given business transaction.	on. 2. Spells the vocabularie s correctly.  The leaner: 1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.	SIMPLE RATES II  Example 6 Pens cost sh. 900, What is the cost of 1 pen? 6 pens = sh. 900 1 pen = 900 6 = sh. 150 1 pen = Sh 150	Discussio n Demonstr ation of shopping.	Learner/ Tr. participati on in the lesson. Learners will do exercise B11 in the lesson notes	Chalk board illustr ation	New Mk mtc pg 238	
5	1 & 2	MEASURES	SIMPLE RATES	SIMPLE RATES III	Critical thing and problem solving.	The leaner: Finds the simple rates and problem solving in a given business transaction.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.	SIMPLE RATES III  Example 5 books cost sh. 1000. Find the cost of 12 similar books.  5 books = 1,000 1 book = 1,000 5 1book = 200 12 bk. = 12 x 200 = 2,400	Discussio n Demonstr ation of shopping.	Learner/ Tr. participati on in the lesson. Learners will do exercise B12 in the lesson notes	Chalk board illustr ation	New Mk mtc pg 238	

	3				Critical	The leaner:	The leaner:	SHOPPING BILLS (TABLES)				
					thinking and	1. Draws a	1. Read	OTTO T TITO BIELO (TABLEO)	Discussio	Drawing	Chalk	New Mk
	&				problem	bill table to	s the	<b>Exampl</b> e	n	and	board	Mtc pg
					solving	represent the	involved	Brenda bought the following items	Discovery	completin	illustr	243
5	4					transaction.  2. Uses	vocabularie s in the	from a shop; 2 loaves of bread at sh 600 @		g bill tables	ation.	
						appropriate	lesson	4 sodas for sh. 500 @		Learners		
						working	correctly in	2 kg of sugar at sh. 1,000 @		will do		
				40		methods to	correct	A bag of maize flour at sh. 9,000		exercise		
		40		LS.		complete the bill	intonation	a) What was his expenditure?		B14 in the		
		ES		BILLS		table.	and pronunciati	ITEM QTY M'THD AMN'T		lesson notes		
		l P		9			on.	<b>Bread</b> 2 2 x 600 1,200		notes		
		MEASURES		SHOPPING			2. Spells	<b>Soda</b> 4 4 x 500 2,000				
		≥		오			vocabularie	<b>Sugar</b> 2 2 x 1000 2,000				
				S			s correctly.	Flour   1bg   1 x 9,000   9,000				
								Total 14,200				
								b) If she went with sh. 15,000, how				
								much did she remain with as her				
								balance? Balance = 15,000				
			r <sub>S</sub>					-14,200				
			BILLS					800				
	5		_		Critical	The leaner:	The leaner:	TRANSPORT CHARGES (WORD)				
					thinking and	Computes	Reads the	Example I	Guided	Tr./learner	Chalk	New
	&				problem	transport	involved	A Taxi driver charges sh. 2,000 for	discussion	Participati	board	Mk Mtc
5	_				solving	charges in	vocabularie	trip from Kampala to Jinja per person.		on in	illustr	pg 243
	6		S.			relation to daily	s in the	How much will 7 people pay?		lesson	ation.	
			(BILLS)	AIS.		real life situation.	lesson correctly in	1 person = 2,000/=		-Learners will do		
		က္က	<u>B</u>	WORD PROBLEMS			correct	7 people = 7 x 2,000		exerciseB		
		MEASURES	တ္ဟ	)BI			intonation	= <u>14,000/=</u>		15 in the		
		ns	GE	) R			and	Example II		lesson		
		EA	AR	DI			pronunciati	Kagoda travelled from Kampala to		notes		
		Σ	끙	OR			on. 2. Spells the	Jinja and then back to Kampala. How				
			TRANSPORT CHARGES	Š			vocabularie	much will he pay if the return fare is				
			Ö				s correctly.	sh. 2,000?				
			ISF					Going = 2,000				
			\X					Back = 2,000				
			<u> </u>					Total = 4,000 <u>He will use sh. 4,000</u>				
		<u>I</u>	]		1			116 WIII USC SII. 4,000	<u> </u>	<u> </u>		

5	8	MEASURES	BILLS	TRANSPORT CHARGES (TABLES)	Problem solving.	The leaner: 1. Interprets transport charges using a table. 2. Solves problems related to the table.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	TRANSPORT CHARGES (TABLE)  Example The table below shows transport charges by bus between different towns in Uganda. Use it to answer the questions that follow:  TOWN CHARGES  KAMPALA - KASESE 3,500  KASESE - TORORO 5,500  KAMPALA - LUGAZI 1,500  MUTUKULA - K'LA 3,000  a) How much will 3 people pay from Kampala to Kasese?  1person = 3,500  3people = 3 x 3,500  = 10,500  3 People will pay sh. 10,500	Discovery Discussio n	-Learners participati on in lesson	Chalk board illustr ation.	Mk (new) Bk. 5 pg. 243.
5	9 & 10	MEASURES	BILLS	TRANSPORT CHARGES (GAPHS)	Problem solving	The leaner:  1. Interprets the cost charges from the graph in relation to the distance.  2. Solves problems in relation to the cost and distance on the graph.	The leaner: 1. Reads the involved vocabularies in the lesson correctly in correct intonation and pronunciation. 2. Spells the vocabularies correctly.	TRANSPORT CHARGES (GRAPH)  Example The Graph below shows bus transport charges along Mukono – Kampala road:  (Refer to the graph in the lesson notes pg 27)  a) How much will one pay for a distance of 15Km?  b) What distance will require me to pay sh. 400?  c) What is the difference in the cost of a journey of 15Km and 5Km?	Discovery Discussio n	Interpretin g a transport graph Learners will do exercise B16 in the lesson notes	Chalk board illustration	Mk (new) Bk. 5 pg. 244

6	2	MEASURES	TIME	UNITS OPF TIME	Critical thinking and problem solving.	The leaner:  1. Mentions the units of time.  2. Converts hours to minutes. Converts minutes to hours.	The leaner: The leaner: 1. Reads the involved vocabularies in the lesson correctly in correct intonation and pronunciation. 2. Spells the vocabularies correctly.	UNITS OF TIME  1 Hour - 60 minutes  1 Minute - 60 seconds  1 Hour - 3,600 seconds  Converting from one unit to another.  Example I Convert 2 hours to minutes  1 hour = 60 minutes  2 hours = 2 x 60 = 120  2 Hours = 120 minutes  Example II Convert 240 minutes to hours  1 minute = 1/60 hours  240minutes = 1/60 x 240 = 4  240 minutes = 4 hours.	Discussio n	Learner/ Tr. Participati on in the lesson. Learners will do exerciseB 17 in the lesson notes	Chalk board illustration.	•(old) Mk 2000 Pupils Bk.5 pg. 226 – 7. •(new) Pupils Bk5 pg. 250 –3; •(new) Understanding MTh Plue Ba
6	& 4	MEASURES	TIME	TELLING TIME USING AM AND PM	Critical thinking and problem solving.	The leaner: 1. Tells time using Am and PM. 2. Reads time using quarter past or to. 3. Draws a clock face showing time.	The leaner:  1. Reads the involved vocabularies in the lesson correctly in correct intonation and pronunciation.  2. Spells the vocabularies correctly.	TELLING TIME USING AM. AND PM Example  (Refer to clock faces on page 40 of the lesson notes) It is 2 O'clock in the morning or 2.00 am.  Telling time using ½, ¼, "Past" or "To"	Guided discussion	Reading time from a clock face Learners will do exercise B18 in the lesson notes	Clock face Chalk board illustr ation	Mk MTh (new) Bk. 5 pg. 250 – 3 (old) 226-7.
6	5	MEASURES	TIME	ADDITION OF TIME	Problem solving	The leaner: Adds time using finite system.	The leaner:  1. Reads the involved vocabularies in the lesson correctly in correct intonation and pronunciation.  2. Spells the vocabularies correctly.	ADDITION OF TIME  Example Workout:  Hours Min 10 50 + 2 30 13 20 { 80 =1 r 20} 60  = 13 Hours 20 Minutes.	Guided discussion	Tr./ Learner participati on in the discussion Learners will do exercise B19 in the lesson notes	Chalk board illustr ation	Underst anding MTh Pupils Bk. 5 Pg. 228- 240

					Problem	The leaner:	The leaner:	SUBTRACTION OF TIME					
					solving	<ol> <li>Subtracts</li> </ol>	1. Read	<u>Example</u>	Guided	Learners'	Chalk	Understa	
6	6					time.	s the		discussion	participati	board	nding	
				ш		<ol><li>Regroups</li></ol>	involved	Hrs. M		on in	illustra	MTh	
				SUBTRACTION ON TIME		correctly in finite	vocabularie	9		discussion	tion	Pupils	
				F		system when	s in the	<del>10</del> 30+60		Learners		Bk. 5 Pg	
		S	ш	Z		borrowing.	lesson	2 4 <u>5</u>		will do		240	
		MEASURES	TIME			borrowing.	correctly in	7 45 (90-45=45)		exercise		240	
		5	-	Ó			correct	1 45 (90-43-43)		B20 in the			
		ΑS		ΙĒ			intonation	7 Hours 45Minutes					
		ы		2				7 Hours 45Minutes		lesson			
		≥		<u>2</u>			and			notes			
				l B			pronunciati						
				١Ξ̈			on.						
				0)			2. Spells						
							the						
							vocabularie						
							s correctly.						
					Critical	The leaner:	The leaner:	FINDING DURATION INVOLVING	Guided				
					thinking and	<ol> <li>Finds the</li> </ol>	The leaner:	"AM" AND "AM"; "PM" AND "PM"	discussion	Finding	Chalk	(New)	
	7			5	problem	duration	1. Read	Example		the	board	Mk Bk.	
				₽¥	solving	involving AM	s the	Luyiga started walking from her		duration	illustr	5 pg.	
6				<u>o</u>	J	and PM.	involved	home at 7.15 am and reached the		by	ation	252	
				₹		2. Solves	vocabularie	town at 9.15 am. How long did it		subtractin			
				]		problems of	s in the	take her?		g			
		ES		9		duration by	lesson			Learners			
		꼭		lź≓		subtraction.	correctly in	Hours Minutes		will do			
		เรา		ZE		Subtraction.	correct	Reached 9 : 15 am		exercise			
		MEASURES	믵	<u> </u>			intonation	Stared – 7 : 05 am		B21 in the			
		Ē	TIME	I F Z			and	2 : 10					
			'	2 =						lesson			
				DURATION INVOLVING PM AND AM.			pronunciati	It took her 2Hours 10 Minutes		notes			
				];			on.						
				FINDING [ AND PM;			2. Spells						
				ם ם			the						
				<del> </del>   <del> </del>   <del> </del>			vocabularie						
				т 4			s correctly.				1		

6	8	MEASURES	TIME	FINDING DURATION INVOLVING AM AND PM.	Problem solving.	The leaner:  1. Finds duration of activities involved the Am and PM.  2. Subtracts and add to find time duration.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	### FINDING DURATION INVOLVING  ### AM AND "PM"    Example	Guided discussion	Finding the duration involving am /p.m. Learners will do exercise B22 in the lesson notes	Chalk board illustr ation	(New Mk) Bk. 5 page 252	
6	9 &	MEASURES	TIME	TIME TABLE	Problem solving	The leaner: 1. Interprets the distance on the timetable. 2. Solves problems related to the timetable. 3. Comprehends the distance timetable and solve the given problems.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	TIME TABLES  Example The table below is a distance timetable for a bus travelling from Masindi to Kitgum. Use it to answer questions that follow.  (Refer to table on page 35 of the lesson notes)  a) At what time did the bus reach Kamudni? b) What time did the bus leave Lira?	Guided discussion Discovery	Drawing and interpretin g tables Learners will do exercise B23 in the lesson notes	Chalk board illustr ation	(new) Mk Bk. 5 pg. 253	
7	1 & 2	MEASURES	TIME	12 HOUR CLOCK SYSTEM UNITS	Critical thinking. and problem	The leaner:  1. Reads time in the 12-hour clock system.  2. Uses pm and am correctly.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	<ul> <li>12 Hour clock system Units</li> <li>Morning am (anti meridian)</li> <li>Afternoon p.m. (Post meridian)</li> <li>The use of "to" and "past"</li> <li>A new day begins at midnight</li> <li>A day has 24 hours</li> </ul>	Guided discussion	Reading time in 12 hour time. Learners will do exercise B24 in the lesson notes	Chalk board illustr ation Clock face	Underst anding MTh Pupils Bk. 5 Pg 250	

			1	1	0.00		T	0.11		T			1	
	3				Critical thinking	The leaner:  1. Reads time in	The leaner: 1. Read	24 Hour Clock i) Units used	"Houre"	Guided	Loornoro	Chalk	Underst	
	&				and	the 24-hour	1. Read s the	12 Hr Clock	24 Hr Clock	discussion	Learners participati	board	anding	
					problem	system.	involved	12:00am (midnight)	0000Hrs	dioodoolori	on in	illustr	MTh	
7	4				solving	2. Uses hours	vocabularie	1:00 am	0100 Hrs	-	lesson	ation	Pupils	
						correctly.	s in the lesson	2:00 am	0200 Hrs	-		Clock face	Bk. 5 Pg 250-1	
				СГОСК			correctly in	3:00 am	0300 Hrs			iace	250-1	
		ES		일			correct	4:00 am	0400 Hrs	-				
		MEASURES	TIME	2			intonation	5:00 am	0500 Hrs					
		AS	≦				and pronunciati	6:00 am	0600 Hrs					
		M		24 HOUR			on.	7:00 am	0700 Hrs	1				
				24			2. Spells	8:00 am	0800 Hrs	1				
							the	9:00 am	0900 Hrs	1				
							vocabularie s correctly.	10:00 am	1000 Hrs					
							S correctly.	11:00 am	1100 Hrs					
								12:00 p.m. ( <b>mid day</b> )						
								1:00 p.m.	1300 Hrs etc.					
					Problem	The leaner:	The leaner:	CONVERTING 12 H		Guided	Learners	Chalk	Underst	
	5				solving	1. Converts	1. Read	HR TIME		discussion	participati	board	anding	
7				R		12-hour clock	s the	Example		Observati	on in	illustr	MTh	
				HOUR		time to 24-hour clock time.	involved vocabularie	What is 1.00pm in 24 1.00	nour time?	on.	lesson Learners	ation Clock	Pupils Bk. 5 Pg	
				4		2. Writes 24-	s in the	+ <u>12.00</u>			will do	face	182	
				M M		hour clock time	lesson	1300 hours			exercise			
			빌	TE.		using hours	correctly in				B25 in the			
			TIME	CLOCK TO 24		without using points.	correct intonation	So 1.00pm = 1300ho	<u>urs</u>		lesson notes			
				125		points.	and				notes			
		m		\ \( \text{\tint{\text{\tin}\xi\text{\texi}\text{\text{\text{\text{\text{\texi}\tint{\text{\texi}\tilitt{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\t			pronunciati							
		Z.		<u>ا</u>			on.							
		lns		12 HOUR			2. Spells							
		MEASURES		_			the vocabularie							
		Σ					s correctly.							

			1	1	I 5	T = 1	<b>-</b>	CONVERTING 40 UP TIME TO 64		1	1	1	
7	6	MEASURES	TIME	24 HOUR CLOCK TO 12 HOUR CLOCK TIME	Problem solving	The leaner: 1. Converts 24 hours to 12 hours. 2. Writes 12 hours in am or pm.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	CONVERTING 12 HR TIME TO 24 HR TIME Example Change 1545hours to 12 hour time 15.45 -12.00 3.45pm So 1545hours = 3.45pm.	Guided discussion Observati on.	Learners participati on in lesson Learners will do exercise B26 in the lesson notes	Chalk board illustr ation Clock face	Underst anding MTh Pupils Bk. 5 Pg 183	
7	7 & 8	MEASURES	RATES OF CHARGES	DISTANCE TIME AND SPEED	Problem solving	The leaner: 1. Finds the distance. 2. Calculates the speed.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	DISTANCE, TIME AND SPEED  DISTANCE: Distance = Speed x Time Example: Find the distance covered by a driver for 2 hours at a speed of 60 km/hr  Distance = Speed x Time = 60km/hr x 2 hrs = 60 km x 2 = 120km He covered 120 km.	Guided discussion	Learner / Tr. participati on in the lesson. Learners will do exercise B27 in the lesson notes  Learners will do exercise B28 in the lesson notes	Chalk board illustr ation	(new) Mk Bk. 5 Pg. 254 – 258	

7	9	MEASURES	SPEED	SPEED AND SPEED	Problem solving.	The leaner: 1. Finds the distance. 2. Calculates the speed.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	SPEED Speed = Distance Time Example: At what speed does a cyclist travel if he completes a distance of 150km in 3 hrs? Speed = Distance Time 50 = 150km 3hrs 1 = 50km/hr	Guided discussion	Learner / Tr. participati on in the lesson. Learners will do exercise B27 in the lesson notes	Chalk board illustr ation	(new) Mk Bk. 5 Pg. 254 – 258	
7	10	MEASURES	TIME	TIME	Critical thinking and problem solving	The leaner: Calculates the time taken by a moving object to cover a given distance	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	TIME Time = Distance Speed  Example: Calculate the time taken by a car travelling at 60km/hr to cover a journey of 480 km. Time = Distance Speed = 480 km 60km/hr 8 = 48 6hr = 8hrs	Guided discussion	Learner / Tr. participati on in the lesson. Learners will do exercise B29 in the lesson notes	Chalk board illustr ation	(new) Mk Bk. 5 Pg. 254 – 258	
8	1	MEASURES	CAPACITY	MEASURES IN LITERS AND MILLILITRES	Critical thinking and problem solving.	The leaner:  1. Uses ml or cc as the same units for measuring liquids.  2. Compares cc to ml.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	MEASURING IN LITRES AND MILLILITRES.  ii) Comparing soda bottles 300ml 300cc  500ml 500cc iii) Comparing milk packets  1litre and 1000 ml  (Refer to diagrams in the lesson notes Pg.55)	Guided discussion	Learner / Tr. participati on in the lesson. Comparin g cc to ml Learners will do exercise B30 in the lesson notes	Chalk board illustr ation Empt y soda bottle s tins bottle s.	(New) Mk 5 pg. 260- new) Mk Bk. 5 pg. 259 -64.3	

8	2 & 3	MEASURES	CAPACITY	CHANGING LITRES TO MI	Critical thinking and problem solving.	The leaner:  1. Changes litres to mi.  2. Converts litres to ml with fractions or decimals.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the	CHANGING LITRES TO ML.  Example  Change 7 litres to ml  1litre = 1000ml 7litres = 7 x 1000 = 7000 ml	Guided class discussion	Learner / Tr. Participati on in class -Learners will do exercise B31 in the lesson	Chalk board illustr ation	(New) Mk 5 pg. 263
8	4 & 5	MEASURES.	CAPACITY	ML TO LITRES	Critical thinking and problem solving.	The leaner:  1. Expresses ml to litres.  2. Reduces fractions by cancelling then with the LDC.	vocabularie s correctly.  The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	EXPRESSING MILLILITRES AS LITRES Example Change 4200 ml to litres $1000Ml = 1Litre$ $1Ml = 1 litre$ $1000$ $4200ml = 1 \times 4200$ $1000$ $= 42 litres$ $= 4.2 litres$	Guided discussion	Learners participati on in lesson -Learners will do exercise B32 in the lesson	Chalk board illustr ation.	(New) Mk 5 pg. 263

	6,				Critical	The leaner:	The leaner:	COMPARING METRIC UNITS				
	,	1			thinking and	1. States the	1. Read	Meaning of metric names	Guided	Comparin	Chalk	(new)
					problem	meaning of the	s the		discussion	g metric	board	Mk Bk.
8	7				solving.	given metric	involved	Place value b) Meaning	Discovery	units	illustr	5 pg.
						names.	vocabularie	Kilo 1000m		-Learners	ation	261
	&					2. Names the	s in the	Hecto 100m		will do		
						basic units for	lesson	Deca 10m		exercise		
						weight, length	correctly in	Deci 1/ <sub>10</sub> m		B33 in the		
	8					and capacity.  3. Recites the	correct intonation	Centi 1/ <sub>100</sub> m milli 1/ <sub>1000</sub> m		lesson		
						standard	and	/1000111				
						ordering of	pronunciati	Basic measure units for:				
						given measures.	on.	Weight – Gram				
						4. Compares	2. Spells	Length – Metre				
						units with	the	Capacity – Litres				
				TS		standard units.	vocabularie					
				∣₹			s correctly.	Ordering Weight, length, capacity				
				C				Km Hm Dm M dm Cm Mm				
		ES	E	굗				Kg Hg Dg <b>G</b> dg Cg Mg				
		MEASURES	CAPACITY	<u> </u>				Kl Hl Dl <b>L</b> dl Cl Ml				
		AS	ΑP	5								
		¥	S	Z				Comparing Units with standard				
		-		AR				units				
				₽				1Km – 1000m 1Kg – 1000g				
				COMPARING METRIC UNITS				1Hm – 100m 1Hg – 100g				
								1Dm – 10m 1Dg – 10g				
								1M - 1m 1G – 1g				
								1dm - 0.1m 1dg – 0.1g				
								1Cm - 0.01 1Cg – 0.01g				
								1Mm - 0.001 1Mg – 0.001g				
								410				
								1Kltr - 1000ltr				
		1						1Hltr - 100ltr	_			
								1Dltr - 10ltr	_			
								1ltr - 1ltr				
								1dltr - 0.1ltr				
		1						1Cltr - 0.01ltr				
								1Mltr - 0.001ltr				

8	9 &	MEASURES	MASS	CHANGING KG TO GMS	Critical thinking and problem solving.	The leaner: 1. Converts KG to grams. 2. Performs calculations involving fractions.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati	Example Express 5kg to grams 1kg = 1000gm 5kg = 5 x 1000 gms = 5000gms	Guided discussion	Learner/Tr .participati on in the lesson. -Learners will do exercise B34 in the lesson	Chalk board illustr ation	(new) Mk bk. 5 pg. 262	
9	1	MEASURES	MASS	GMS TO KMS CH	Problem solving.	The leaner:  1. Expresses grams to Kg.  2. Expresses grams to Kg using fractions.	on. 2. Spells the vocabularie s correctly.  The leaner: 1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on. 2. Spells the vocabularie s correctly.	EXPRESSING GRAMS TO KG  Example Express 4000g in Kg 1000g = 1kg 1g = 1 kg 1000 4 4000g = 1 x 4000 1000 4000 g = 4kg	Guided class discussion	Learners participati on in class -Learners will do exercise B35 in the lesson	Chalk board illustr ation	(New) Mk Bk. 5 Pg. 262	
9	3	GEOMETRY	LINES	LINES	Critical and creative thinking	The leaner: 1. Defines a line. 2. Defines a line segment. 3. Names the types of lines. 4. Draws each type. 5. Identify the types of lines.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	LINES 5. Definition of a line. 6. Definition of a line segment. 7. Naming the types of lines. 8. Describing each type of line. 9. Drawing each type of line. 10. Identifying the types of lines.	Guided discussion	Learners' participati on in the lesson.	M,Ch alkbo ard illustr ation Desks Walls	A new Mk Math page 175-176	

	4			ES	Problem solving.	The leaner: 1. Defines intersecting lines.	The leaner:  1. Reads the involved vocabularie	INTERSECTING LINES  5. Definition of intersecting lines.  6. Forming intersecting lines	Guided discussion	Drawing intersectin g lines.	Pencil s Rubb	A new Mk Math
9		GEOMETRY	LINES	INTERSECTING LINES		Forms     intersecting     lines.     Identifies     points of     intersection of a     given line .     Names     the points of     intersection.	s in the lesson correctly in correct intonation and pronunciati on. 2. Spells the vocabularie s correctly.	using straight objects.  7. Identifying points of intersection.  8. Naming the points of intersection.		Learners will do Exercise C1	er Band s Chalk board illustr ation	page 179
9	5	GEOMETRY	LINES	PARALLEL LINES.	Critical thinking and problem solving.	The leaner:  1. Defines a parallel line.  2. Draws the symbol for parallel lines.  3. Draws parallel lines.  4. Identifies parallel lines from a set of a given lines.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	PARALLEL LINES  Definition of parallel lines. The symbol for parallel lines. Drawing parallel lines. Identifying parallel lines.	-Guided discussion observatio n	Drawing parallel lines. Identifying parallel lines from immediate surroundin g.	Objects in and out of the class rooms eg desks	A new Mk Math page 175-176
9	6 & 7	GEOMETRY	LINES	PERPENDICULAR LINES.	Critical thinking and problem solving	The leaner:  3. Describe perpendicular lines.  4. Draw a symbol for perpendicular lines.  5. Name some shapes with perpendicular lines.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	PERPENDICULAR LINES  1) Description of perpendicular lines.  2) The symbol for perpendicular lines.  3) Identifying perpendicular lines.  4) Identifying perpendicular lines.  5) Naming some shapes with perpendicular lines.	-Guided discussion - observatio n	Learners will do Exercise C 3	Objects in and out of the class rooms eg desks, walls, books, sets, rulers, etc.	A new Mk Math page 180-185

9	8 & 9	RY		SYMETRY	Critical thinking and problem solving.	The leaner:  1. Defines folding lines of symmetry.  2. Identifies symmetric and non-symmetric	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in	LINES OF SYMETRY  4. Definition of line of symmetry.  5. Meaning of symmetric and non-symmetric figures.  6. Figures and lines of symmetry.	-Practical lesson - Discussio n	Learners will do Exercise C4	Pairs of scisso rs, sheet s of	A new Mk Math page 184-185
		GEOMETRY	LINES	LINES OF SYN		shapes. 3. Uses the given shapes to find out the number of folding symmetry.	correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	7. The number of folding symmetry in different shapes.			rectan gular paper	
9	10	GEOMETRY	LINES	CIRCLES	Problem solving.	The leaner: 1. Defines a circle. 2. Names parts of the circle. 3. Identifies the types of a circle.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	A CIRCLE  3. Definition of a circle. 4. Naming parts of a circle. 5. Identifying the parts of a circle.	-Guided discussion	Learners will write some informatio n about the Circle in their notes.	Chalk board illustr ation	A new Mk Math page 186
10	1 & 2	GEOMETRY	FINDING RADIUS WHEN DIMETER IS GIVEN	RADIUS WHEN DIAMETER IS GIVEN.	Critical thinking and problem solving.	The leaner: 1. Defines radius. 2. Identifies radius on a circle. 3. Calculates the radius of a circle when diameter is given.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	FINDING RADIUS WHEN DIAMETER IS GIVEN Definition of radius.  Example Calculating the radius of a circle when diameter given is 8cm.  Radius = Diameter 2 = 8cm 2 Radius = 4cm	-Guided discussion - observatio n	Learners will do Exercise C5	Chalk board illustr ation	Underst anding mtc pg 184

10	3	GEOMETRY	FIND DIAMETER WHEN RADIUS IS GIVEN		Problem solving.	The leaner:  1. States the relationship between the radius and the diameter.  2. Calculates the radius of a circle when diameter is given.  3. Applies the right units for the answer.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	FINDING DIAMETER WHEN RADIUS IS GIVEN 3. Definition of diameter. 4. Identifying diameter from a circle. 5. The relationship between the diameter and the radius.  Example Calculating the diameter of a circle when radius given is 13cm.  Diameter = 2r = 2 x r = 2 x 13cm  Diameter = 26cm	-Guided discussion - observatio n	Learners will do Exercise C6	Chalk board illustr ation	Underst anding mtc pg 185	
10	4 & 5	GEOMETRY	CIRCLES	CONSTRUCTING CIRCLES	Drawing	The leaner:  1. Constructs a circle when radius is given.  2. Constructs a circle when diameter is given.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	CONSTUCTING A CIRCLE Constructing a circle when radius is given. Constructing a circle when diameter is given.  Constructing a circle when diameter is given.	Demonstr ation Observati on	Learners will do Exercise C7& C8	- ruler - pair of comp asses chalk board illustr ation	A new Mk Math page 186	
10	6	GEOMETRY	EQUILATERALS	CONSTRUCTING EQUILATERALS	Drawing	The leaner:  1. Constructs an equilateral triangle using a ruler and a pair of compasses.  2. Constructs an equilateral triangle in a circle.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	CONSTRUCTING EQUILATERAL TRIANGLE  4. Constructing equilateral triangles using a ruler and pair of compasses only.  5. Constructing an equilateral triangle in a circle.	Demonstr ation Observati on	Learners will do Exercise C9 &C10	- ruler - pair of comp asses - chalk board illustr ation	A new Mk Math page 186-189	

10	8	GEOMETRY	HEXAGON	A REGULAR HEXAGON	Critical thinking and problem solving	The leaner: 1. Constructs a regular hexagon in a circle. 2. Carries out accurate measurement.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	A REGULAR HEXAGON IN A CIRCLE Constructing a regular hexagon in a circle	Demonstr ation Observati on	Learners will do Exercise C11	- ruler - pair of comp asses chalk board illustr ation	A new Mk Math page 188	
10	9	GEOMETRY	ANGLES	TYPES OF ANGLES	Critical thinking and problem solving.	The leaner:  1. Defines an angle.  2. Describes the relation and revolution.  3. Relates angles made to each turn.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	ANGLES. 3. Definition of an angle. 4. Description of a rotation and revolution. 5. Demonstration of rotation and revolution.	Demonstr ation Observati on	Learners will do Exercise C12	Chalk board illustr ation. Body move ments	A new Mk Math page 189-190	
10	10	GEOMETRY	COMPASS	DIRECTION	Critical thinking and problem solving.	The leaner:  1. Names parts of a compass.  2. Estimate angles between two given directions.  3. Establishes small and big angles between two given directions.	The leaner:  1. Read s the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	Naming parts of a compass.     Naming parts of a compass.     Estimating angles between two given directions.     Establishing smaller and bigger angles between two given directions.	Demonstr ation Observati on	Learners will do Exercise C13	-Chart showi ng comp ass directi on.	A new Mk Math page 191-192	

11					Critical	The leaner:	The leaner:	CLOCKWISE AND				
	1	GEOMETRY	COMPASS DIRECTION	TURNS	thinking and problem solving.	1. Finds angles made on a compass direction on making a turn. 2. Finds direction made on a compass from an angle of turn.	1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	ANTICLOCKWISE TURNS     1. Finding angles made on a compass direction on making a turn.     2. Finding directions made on a compass direction from an angle of turn.	Demonstr ation Observati on	Learners will do Exercise C14	Chalk board illustr ation. Body move ments	A new Mk Math page 192
11	2	GEOMETRY	ANGLES	TYPES OF ANGLES	Problem solving.	The leaner:  1. Names types of angles.  2. Describes each type of angles.  3. Draw each type of angles.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	TYPES OF ANGLES  4. Naming types of angles. 5. Describing each type of angle. 6. Drawing each type of angle. 7. Identifying each type of angle. angle.	Demonstr ation Observati on	Learners will do Exercise C15	Chalk board illustr ation	A new Mk Math page 193
11	3	GEOMETRY	ANGLES	MEASURING ANGLES USING A SCALE	Problem solving.	The leaner: 1. Names the two types of scales. 2. States when each scale is used.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	MEASURING ANGLES USING A PROTRACTOR. 4. The inner and outer scale of a protractor. 5. When the outer scale is used. 6. When the inner scale is used. 7. Using a protractor to measure given angles.	- Discussio n - Observati on	Learners will do Exercise C16	- Protra ctor - Pencil	A new Mk Math page 194-196

	4				Problem solving	The leaner: 1. Constructs	The leaner: 1. Reads the	CONSTRUCTING ANGLES. Constructing angles using a	Discussio n	Learners	- Protra	A new
11		GEOMETRY	ANGLES	CONSTRUCTING ANGLES	solving	angles using a protractor.  Labels and name the constructed angles.	1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie	protractor.	n - Observati on	will do Exercise C17	ctor -Ruler - Pencil	A new Mk Math page 197
		5	4				s correctly.					
11	5	GEOMETRY	ANGLES	MEASURING ANGLES	Problem solving.	The leaner:  1. Measures angles on a straight line using a protractor.  2. Uses inner and outer scale of a protractor to measure angels on both sides of a straight line	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	5. Measuring angles on a straight line using a protractor. 6. Use of the inner and outer scales.	- Discussio n - Observati on	Learners will do Exercise C18	Protra ctor	A new Mk Math page 198
11	6	GEOMETRY	ANGLES	FINDING ANGLES MARKED BY LETTERS	Critical thinking and problem solving.	The leaner:  1. Finds the value of the unknown angles.  2. Collects like terms.	The leaner:  1. Reads the involved vocabularie s in the lesson correctly in correct intonation and pronunciati on.  2. Spells the vocabularie s correctly.	FINDING ANGLES MARKED BY  LETTERS  Example $45^{\circ}$ m <sup>0</sup> $m + 45^{\circ}$ = $180^{\circ}$ (supl. Angles) $m + 45^{\circ} - 45^{\circ} = 180^{\circ} - 45^{\circ}$ $m = 135^{\circ}$ .	Discussio n Observati on	Learners will do Exercise C19	Chalk board illustr ation	A new Mk Math page 200