MATHEMATICS SCHEME OF WORK FOR PRIMARY SIX TERM TWO

EXPECTED LEARNING OUTRCOME: The learner solves problems involving fractions and relates them to real life situations.

WK	PD	THEME	TOPIC	SUB-TOPIC	COMPETENCES		CONTENT	INDICATORS OF LIFESKILLS & VALUES	METHODS/TECHNIQUES	ACTIVITY	INS. MAT	REF	REM
					SUBJECT	LANGUAGE							
1	1	NUMERACY	FRACTIONS	Definition of a fraction Types of fractions changing improper	The learner: - defines a fraction. - changes mixed fraction to improper fraction.	- names and describes fractions - reads statement - writes notes	A fraction is a part of a whole. Types of fractions -Proper fractions e.g. ½, $^2/_3$, ¾ e.t.c. -Improper fractions e.g $^3/_2$, $^4/_3$ e.t.c -Mixed fraction e.g 1 ¾, 5 $^7/_9$ e.t.c. -Decimal fractions e.g. 0.4, 1.35 e.t.c -Equivalent fractions e.g $^2/_3$ = $^4/_6$ = $^6/_9$ e.t.c. Recurring fractions e.g. 0.33…. -Changing improper fractions to mixed fractions. Example.	**Effective communication** fluency confidence **Problem solving** taking decision making choice **Values** Co-operation	Explanation Guided discussion Think, pair & share	Naming types of fractions - copying notes - changing improper	Chalkboard illustrations Real objects	Mk. Maths bk. 5 page 116 P.6 curr. page 162	

				fractions to mixed fractions			1.Change $^{9}/_{4}$ to a mixed fraction. Method: Divide the numerator by the denominator 2 $^{9}/_{4}$ = 4⁄9 -8 1 = 2 ¼	appreciation		fractions to mixed fractions			
	2			Changing mixed fr2actions to improper fractions	The learner: - relates improper fractions and mixed fraction. - changes mixed fractions to improper fraction.	- reads statements - writes an activity involving changing mixed fractions to improper fractions.	Changing mixed fractions to improper fractions. Examples Change 4 $^{2}/_{3}$ to improper fraction Method: DxW+N / D 4 $^{2}/_{3}$ = 3 x 4 + 2 / 4 = 12 + 2 / 4 = 14 / 4 2. change $^{2}/_{5}$ to decimal	**Effective communication** fluency **Problem solving** taking decision **Values** Co-operation	Explanation Discussion Think, pair & share	Changing mixed fractions to improper fractions	Chalkboard illustrations	Mk Maths book 5page 117 Primary Six curriculum page 162	
	3			Expressing recurring fractions as	The learner: - identifies repeated digits - expresses recurring	- names place values of repeated figures.	Writing recurring fraction as common fractions. Example Express 0.33….. as a common fraction. Let the no be y. Y= 0.33…. 10x y =0.33….x10	**Effective communication** fluency **Problem solving**	Question and answer	Changing recurring fractions as	Chalkboard illustrations	Mk Maths book 6 page 138	

				common fractions	fractions as common fractions	- reads the key words. - pronounces the key words.	10y = 3.33… 10y=3.33…. -y = -0.33…. $\frac{9y}{9} = \frac{3}{9}$ y= $1/3$	taking decision **Values** Co-operation		common fractions in the lowest terms		(old edition) P.6 curr. pg 152,163,164	
	4		FRACTIONS	Finding equivalent fractions	The learner: - finds the next equations fractions. - finds the H.C.F - applies the H.C.F. to reduce given fractions. - identifies common factors.	- reads statements - pronounces the key words. - writes fractions.	Finding equivalent fractions Examples Write the next equivalent fraction in $2/3 = 4/6 = 6/9 =$ 2x4 = 8 3x4 = 12 $2/3 = 4/6 = 6/9 = 8/12$	**Effective communication** fluency **Problem solving** making choice **Values** appreciation	Explanation Discussion Question and answer Market stall	Finding equivalent fractions	Chalkboard illustrations	Mk maths book 6 page 109 P.6 curr. page 162, 163, 164	
	4			Reducing fractions	The learner: - finds the next equivalent fractions.	- reads statements - pronounces the key words	Reducing fractions Example Reduce 8/12 to the lowest terms. $8 = 8 \div 2 = 4 \div 2 = 2$ $12 \quad 12 \div 2 \quad 6 \div 2 \quad 3$	**Effective communication** confidence	Explanation Discussion	Finding highest common factors	Chalkboard illustrations	Mk Maths book 5 page 118	

					- finds the HCF - applies the HCF to reduce given fractions. identifies common factors	- writes fractions	So 2 x 2 = 4 and 4 is the HCF of 8 and 12. 8 ÷ 4 = 2 12÷ 4 3	**Problem solving** taking decision **Values** Co-operation appreciation	Question and answer Market stall	Dividing by the highest common factors to reduce fractions		Primary Six curriculum page 162	
	5		FRACTIONS	Ordering fractions	The learner: - finds the lowest common multiples. - calculates the values of fractions. - arranges fratcions in both ascending and descending order	- reads statements - pronounces the key words - writes fractions	Ordering fractions -Arranging fraction in either ascending or descending order. Example. Arrange ¾ , $^2/_3$, ½ in ascending order. $\underline{3}^{x3}$, $\underline{2}^{x4}$, $\underline{1}^{x6}$ LCM 4 3 2 | 2 | 4 3 2 2 | 2 3 1 9, 8, 6 3 | 1 3 1 12 1 | 1 1 9, 8, 6 2x2x3 Order: 4 x 3 =12 $^1/_2$, $^2/_3$, $^3/_4$	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Guided discovery Market stall Question and answer	Arranging fractions in required order.	Chalkboard illustrations	Mk Maths book page 119 Primary Six curriculum page 162	
	6	on	FRA	Operation	The learner:	- reads fractions	Addition and subtraction of fractions with different denominators	**Effective communication**	Explanation	Adding and subtrac	Chalkboard illustr	Mk. Maths book 6	

			C T I O N	fractions	- adds and subtracts fractions	- pronounces the key words correctly.	Examples Simplify: $\frac{1}{2} + \frac{2}{3}$ LCM 2 | 2 | 3 3 | 1 | 3 1 | 1 x 3= 6 $\frac{1^{x3}}{2} + \frac{2^{x2}}{3}$ $\frac{1x3 + 2x2}{6} = \frac{3 + 4}{6}$ = 7/6 1 rem 1 = 1 1/6 2. $\frac{4}{5} - \frac{1}{3}$ LCM 3 | 5 | 3 5 | 5 | 1 1 | 1 $\frac{4^{x3}}{5} - \frac{1^{x5}}{3}$ 3x5=15 $\frac{4x3 - 1x5}{15}$ $\frac{12 - 5}{15} = {}^{7}/_{15}$	confidence **Problem solving** taking decision **Values** Co-operation appreciation	Guided discovery Gallery walk Question and answer	ting fractions with different denominators Finding LCM Simplifying fractions of different addition and subtraction	ations	page 106 Primary Six curriculum page 162	

	7		FRACTION	Addition and subtraction of mixed fractions	The learner: - changes mixed fractions to improper fractions. - simplifies mixed fractions in addition and subtraction	- reads fractions - writes fractions	Simplifying mixed fractions in addition and subtraction. **Examples** Simplify: 1. $1\frac{1}{2} + 3\frac{1}{4}$ $\frac{1 \times 2 + 1}{2} + \frac{3 \times 4 + 1}{4}$ $\frac{3x2}{2} + \frac{13x1}{4}$ $\frac{3x2+13x1}{4}$ $\frac{6 + 13}{4}$ LCM 2 | 2 | 4 2 | 1 | 2 1 | 1 2 x 2 =4 = 19 4 rem 3 4 $= 4\frac{3}{4}$ 2. $4\frac{1}{2} - 1\frac{5}{6}$ $\frac{2 \times 4 + 1}{4} - \frac{6 \times 1 + 5}{6}$ $\frac{9^{x3}}{4} - \frac{11^{x2}}{6}$ $\frac{9x3 - 11x2}{12}$ $\frac{27-22}{12}$ LCM 2 | 4 | 6 2 | 2 | 3 3 | 1 | 3 1 | 1 2 x 2 x 3 4 x 3 $= \frac{5}{\ }$	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer Think, pair & share	Adding and subtracting mixed fractions	Chalk board illustrations	Mk. Maths book 6 page 106 Primary Six curriculum page 162	

							12 =12						
2	1		FRACTION	Combined addition and subtraction of fractions	The learner: - solves fractions in word problems in addition and subtraction	- reads and interpretes statements. - writes notes - explains the relationship between addition and subtraction.	Simplifying fractions with combined operations of addition and subtraction. Example Simplify: 1. ½ - $^2/_3$ + $^1/_5$ $\frac{1}{2}^{x15} + \frac{1}{5}^{x6} - \frac{2}{3}^{x10}$ LCM $\frac{(1x15)+(1x6)-(2x10)}{30}$ 2 | 2 | 3 | 5 3 | 1 | 3 | 5 5 | 1 | 1 | 5 1 | 1 | 1 $\frac{(15+6)-20}{30}$ 2 x 3 x 5 $\frac{21-20}{30}$ 6 x 5 30 = $\frac{1}{30}$	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer Think, pair & share	Finding lowest common factor - solving fractions	Chalk board illustrations	Understanding Maths book page 108 Primary Six curriculum page 162	
	2		FRACTIONS	Addition and subtraction of fractions in word	The learner: - solves fractions in words problems in addition and subtraction. - adds fractions	- reads and interpretes statements. - writes notes - explains the	Addition and subtraction of fractions in word problems. Examples 1. A man used three quarters of his Shamba grow cocoa, a half to grow peas and two thirds to grow coffee. Find the Total fraction of the whole land used.	**Effective communication** confidence **Problem solving** taking decision	Explanation Discussion	- Solving fractions in word problems involving		Revision Maths for upper primary page 30	

				probl ems	- subtracts fractions	relationshi p between addition and subtract.	$\frac{3}{4} + \frac{1}{2} + \frac{2}{3}$ LCM $\frac{3^{x3}+1^{x6}+2^{x4}}{4 \quad 2 \quad 3}$ $\frac{(3x3)+(1x6)+(2x4)}{12}$ $\frac{9+6+8}{12}$ $\frac{15+8}{12}$ $= 23^{1}$ rem 11 12^{1} = $1\ 11/12$ 2. A baby was given $5/6$ litres of milk and drank $7/12$ litres. How much milk remained. $\frac{5 - 7}{6 \quad 12}$ LCM $\frac{5^{x2} - 7^{x1}}{6 \quad 2}$ $\frac{(5x2) - (7x1)}{12}$ $\frac{10-7}{12}$ $= \frac{3}{12}$ = ¼	**Values** Co-operation appreciatio n	Questi on and answer Market stall	additio n and subtrac tion		Primar y Six curricul um page 162	

2	4	2	3
2	2	1	3
3	1	1	3
	1	1	1

2	2	12
2	3	6
3	3	3
	1	1

2 x 2 x3

4x3

12

	3		FRACTIONS	Multiplication of fractions	The learner: - relates factors and multiples. - simplifies fractions correctly. - changes mixed fractions to improper fractions	- reads and use the key words. - writes the given fractions	-Multiplication of fractions by whole numbers. Examples 1. Simplify 1) $\frac{1}{3}$ x 12 = $\frac{1}{3_1}$ x 12^{4} = 1 x 4 = 4 2) $\frac{3}{4}$ of 12 = $\frac{3}{4_1}$ x 12^{3} = 3 x 3 = 9	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion question and answer think, pair & share	Multiplying fractions	Chalkboard illustrations	Mk Maths book 6 page 107 Primary Six curriculum page 162	
			FRACTIONS	Multiplication of fractions			-Multiplication of fractions by fractions. Examples Simplify: 1) $\frac{1}{3}$ x $\frac{4}{5}$ = $\frac{1}{3}$ x $\frac{4}{5}$ = $\frac{4}{15}$ 2) 1 ½ x 1/3	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation		Multiplying fractions	Chalkboard illustrations	Mk maths book 6 page 119-120 Primary Six curriculum pg 162	

	4		FRACTIONS	Reciprocals - division of fraction by whole numbers.	The learner: - describes reciprocal - finds reciprocal - divides fractions	- reads the keywords. - writes fractions	Reciprocals: Fractions whose product is 1 are reciprocals. Example Find the reciprocal of 2/3. Let the reciprocals be m. $\frac{2}{3} \times m = 1$ $\frac{2m}{3} = \frac{1}{1}$ $\frac{3^1 \times 2m}{3^1} = 1 \times 3$ $2m = 3$ $\frac{{}^1\cancel{2}m}{\cancel{2}^1} = \frac{3}{2}$ $M = \frac{3}{2}$ Division of fractions by whole numbers. Example Work out: $\frac{2}{3} \div 2$ $\frac{2}{3} \div \frac{2}{1}$ $\frac{\cancel{2}^1}{3} \times \frac{1}{\cancel{2}_1} = \frac{1}{3}$	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer Market stall	Finding reciprocals Solving fractions involving division of whole numbers	Chalk board illustrations	Mk Maths book 6 page 111-112 Primary Six curriculum page 162	

	5		FRACTIONS	Division of - fractions by fractions - mixed fractions by mixed fractions	The learner: - applies reciprocal in division of fractions - changes mixed fractions to improper fractions - solve fractions involving division	- reads the key words correctly. - pronounces the key words correctly.	Division of fractions by fractions. Examples Simplify: 1. $\frac{3}{4} \div \frac{1}{2}$ $\frac{3}{4} \times \frac{2}{1}$ $\frac{3}{2} = 3/2$ 1rem 1 $= 1\frac{1}{2}$ 2. $2\frac{1}{2} \div 1\frac{1}{4}$ $\frac{(2 \times 2) + 1}{2} \div \frac{(4 \times 1) + 1}{4}$ $\frac{5}{2} \div \frac{5}{4}$ $\frac{5}{2} \times \frac{4}{5}$ $\frac{2}{1}$ 1×2 $1 \times 1 = 2$	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer Guided discovery Brain storming	Finding reciprocal Changing mixed fractions to improper fractions Simplifying fractions	Chalkboard illustrations	Mk maths book 6 112 Primary Six curriculum page 162	
	6	= 2	FRACT	Mixed operations with opera	The learner: - works out the solution - finds the lowest	- reads BODMAS - describes BODMAS in	Mixed operations with fractions. -Use of BODMAS B Brackets ( ) O of of D Division ÷	**Effective communication** confidence	Explanation	Simplifying mixed operations	Chalkboard illustrations	Mk Maths book 6 page 113	

			I O N S	tions (BOD MAS)	common multiples.	simplifying fractions - finds lowest common multiples	M Multiplication x A Addition + S Subtraction _ Examples Simplify: 1. $\frac{5}{6} - \frac{3}{4} \div 1\frac{1}{2}$ $\frac{5}{6} - \frac{3}{4} \div \frac{3}{2}$ BODMAS 1 $\frac{5}{6}\left(-\frac{3}{4} \times \frac{2}{3}\right)$ $\frac{5^{x1}}{6} - \frac{1^{x3}}{2}$ LCM $\frac{5x1 - 1x3}{6}$ $\frac{5 - 3}{6}$ $= \frac{2}{6}$ $= \frac{1}{3}$ 2) $\frac{1}{3} \times \frac{1}{2} + \frac{1}{4} \times \frac{1}{5}$ $\left(\frac{1}{3} \times \frac{1}{2}\right) + \left(\frac{1}{4} \times \frac{1}{5}\right)$ $\frac{1}{} + \frac{1}{}$ LCM 2 6 | 2 3 3 | 1 1 | 1 $\frac{2 \times 3}{=6}$	**Problem solving** taking decision **Values** Co-operation appreciation	Discussion Question and answer Brain storming	with fractions using BODMAS		Primary Six curriculum page 162	

							6 20						
	7		FRACTIONS	Decimals	The learner: - identifies correct place values - adds decimals up to ten thousandths - adds decimals up to ten thousandths with carrying.	- reads decimals - writes decimals - writes the given fractions	-Addition of decimals without carrying. Examples. Workout: 1) 1.5 + 0.4 = 1.5 +0.4 1.9 2. 7.04 + 1.6 = 7.04 + 1.60 8.64 -Addition of decimals with carrying. Examples. Work out. 1) 1.5 + 1.6 = 1. 5 +1. 6 3.1	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Illustration Think, pair & share Discussion Question and answer	Adding decimal with or without carrying	Chalkboard illustrations	Mk maths book 6 page 114 Primary Six curriculum page 162	
			FRACTIONS		The learner: - identifies correct place values - adds decimals up to ten thousandths - adds decimals up	- reads decimals - writes decimals - writes the given fractions	Subtraction of decimals without borrowing. Examples Simplify: 1. 2.5 – 1.3 = 2.5 - 1.3 1.2 2. 2.85 – 0.03 = 2.085	**Effective communication** confidence **Problem solving** taking decision **Values**	Explanation Illustration Discussion	Subtracting decimals with or without borrowing	Chalkboard illustrations	Mk Maths book 6 page 114 Primary Six curriculum	

					to ten thousandths with carrying.		-0.030 2.055 -subtraction of decimals with borrowing. **Examples** Simplify: 1. 2.8 – 0.9 = 2.18 - 0.9 1.9 = 1.9 2. 1.45 – 0.6 = 1. 45 - 0.60 0.85 = 0.85	Co-operation appreciation	Question and answer Brain storming			page 162	
3	1		FRACTIONS	Decimals	The learner: - solves decimals with addition and subtraction - re-arranges fractions	- reads instructions - writes the given fractions	-Addition and subtraction of decimals (consolidated) Examples Work out 1. 8-5.16+2.13 8+2.13 -5.16 8.00 + 2.13 10.13 – 5.16 Sw 10.13 - 5.16	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Think, pair & share Illustration Discussion Question and answer	Adding and subtracting of decimals	Chalk board illustrations	Mk Maths book 6 page 115 Primary Six curriculum page 162	

							4.97 = 4.97 2. 7-0.45+1.71						
	2		FRACTIONS	Decimals	The learner: - adds decimals in words - identifies place values - changes decimals to common fractions - multiples denominators and numerators alone.	- reads the statements - pronounces the words correctly. - writes words.	Word problems involving addition and subtraction of decimals. Examples. 1. Mary bought 4.5 litres of milk and 0.35litres got spoilt. How many litres were left? 4.5 - 0.35 = 4.50 -0.35 4.15 = 4.15litres_____ 2. In a Ludo game, Musa scored 7.5 points in the first round and 3.8 points in the second round. How many points did he score altogether? 1st round - 7.5 2nd round - +3.8 11.3points	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer	Solving decimals in word problems involving addition and subtraction	Chalkboard illustrations	Mk Maths book 6 page 116 Primary Six curriculum page 162	
			FRACT	Decimals	The learner: - adds decimals in words	- reads the statements - pronounces the	Multiplication of decimals. Examples Simplify: 1. 0.9 x 0.5 = 9 x 5	**Effective communication** confidence	Explanation	Multiplying decimals	Chalkboard illustrations	Mk maths book 6 page 118	

			I O N S		- identifies place values - changes decimals to common fractions - multiples denominators and numerators alone.	words correctly. - writes words.	10 10 = 45 100 = 0.45 2. 1.32 x 2.4 132 x 24 sw 100 10 132 x 24 528 = 3168 +2640 1000 3168	**Problem solving** taking decision **Values** Co-operation appreciation	Guided discussion Question and answer			Primary Six curriculum page 162	
	3		F R A C T I O N S	Decimals	The learner: - changes decimals to common fractions - finds reciprocals - change division sign to multiplication sign	- reads the statements - pronounces the words correctly. - writes words.	Division of decimals Examples Simplify: 1) 8 ÷ 0.02 8 ÷ 2 1 100 8 x 100 1 2 4 x 100 = 400 2) 0.02 ÷ 0.8 Consolidation of multiplication and division of decimals Examples. Workout:	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Guided discussion Question and answer	Dividing decimals Simplifying decimals involving both multiplication and division	Chalkboard illustrations	Mk Maths book 6 page 121 Primary Six curriculum page 162	

							1. $\frac{0.7 \times 0.6}{0.3}$ $(0.7 \times 0.6) \div (0.3)$ $\left(\frac{7}{10} \times \frac{6}{10}\right) \div \frac{3}{10}$ $\frac{7}{10} \times \frac{6}{10} \times \frac{10}{3}$ $\frac{7 \times 2}{10} = \frac{1.4}{10}$ $= 1.4$		Think, pair & share				
	4		F R A C T I O N S	Deci mals	The learner: - solves word problems involving multiplicatio n and division of decimals.	- reads and interprets statements - writes notes	Word problems involving multiplication and division of decimals. Examples 1. The length of one side of a square is 8.75cm. Find the perimeter of the square. 8.75cm P = add all sides = 4s =4 x 8.75 =4 x $\frac{875}{100}$ = $\frac{3500}{100}$ =35cm 2. a parcel weighing 5.5kg contains packets of salt. How	**Effective communic ation** confidence **Problem solving** taking decision **Values** Co-operation appreciatio n	Explan ation Discus sion Illustrat ion Questi on and answer	Measur ing items like water - solving word proble ms involvin g Multipli cation and division	Chalk board illustr ation	Mk Maths book 6 Primar y Six curricul um page 162	

							many packets of salt are in the parcel if each packet weighs 0.25kg 5.5 ÷ 0.25 $\frac{55}{10} \div \frac{25}{100}$ $\frac{55}{10} \times \frac{100}{25}$ 11 x 2 = 22 packets		Market stall				
	5		F R A C T I O N S	Ratios and proportions	The learner: - defines ration - expresses ration as fractions - expresses quantities as ratio	- reads the key words - use the key words to make sentences. - writes ratios.	Definition of a ratio -A ratio is a comparison of quantities. Symbols used in reading and writing ratios –: - 2:3 read as 2 to three Expressing ratios as fraction Example Express 2:3 as a fraction 2:3 = 2/3 Expressing fractions as ratios Examples: 1. Express ¾ as a ratio ¾ = 3:4 2. Write 0.7 as a ratio 0.7 = 7/10 = 7:10	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Market stall Question and answer	Defining a ratio - Reading and writing ratios . Expressing -ratios as fractions - fractions as ratios	Chalk board illustrations	Mk maths book 6 page 124 - 125 Understanding Maths book 6 page 107	

			F R A C T I O N S	Ratios and proportions	The learner: - defines ration - expresses ration as fractions - expresses quantities as ratio	- reads the key words - use the key words to make sentences. - writes ratios.	Expressing quantities as ratios Example 1. There were 200 people at a party. 80 were females and the rest were males. Find the a) ratio of males to females. Males = 200-80 =120 M:F 120:80 $= \frac{120}{80} = \frac{12}{8} = \frac{3}{2}$ =3:2 b) ratio of males to the whole group. M:T 120:200 120:200 10 10 $12:20 = \frac{12}{10} = 3:5$	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer Brain storming	Expressing quantities as ratios.	Chalkboard illustrations	Mk Maths book 6 page 127 Function book 6 page 100 Primary Six curriculum page 162	
	6		F R A C T I O	Ratios and proportions	The learner: - identifies the new ratio - identifies the old ratio	- reads the key words correctly. - pronounces the key	Increasing quantities in a given ratio. Example 1. Increase sh. 2000/= in the ratio 5:4 New:Old 5 : 4	**Effective communication** confidence **Problem solving**	Explanation Discussion	Increasing quantities in given ratios	Chalkboard illustrations	Mk Maths book 6 page 129 Primary Six	

			NS		- calculates the new quantities	words correctly.	5 x ~~2000~~ ~~500~~ / ~~4~~ ~~1~~ 5 x 500 =shs 2500/=	taking decision **Values** Co-operation appreciation	Question and answer			curriculum page 162	
	7		FRACTIONS	Ratios and proportions	The learner: - identifies the new and old ratios. - finds the ratio increase.	- reads and comprehends statements - writes ratios	Finding ratio increase Example A man's salary was increased from 10,000/= to shs 12.000/= per day. In what ratio did it increase? New : old 12000:10000 12000 10000 ~~12~~ ~~6~~ ~~10~~ ~~5~~ = 6 5 = 6:5	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Discussion Question and answer Brain storming	Finding the ratio increase	Chalkboard illustrations	Mk maths book 6 page 130 Primary Six curriculum page 162	
4	1	on	FRACTIO	Ratios and proportions	The learner: - identifies the new and old ratio. - decrease quantities in	- reads and interprets the statement.	Decreasing quantities in given ratios. Example 1. Decrease 4000kgs in the ratio 3:4 New : Old 3 : 4	**Effective communication** confidence **Problem solving**	Explanation Discussion	Decreasing ratios in quantities	Chalkboard illustrations	Mk Maths Book 6 page 131 Primary Six	

			N S		a given ration	- writes the decreased ratios	3 x 4000/1000 / 4/1 / 3 x 1000 / 3000kgs	taking decision **Values** Co-operation appreciation	Question and answer			curriculum page 162	
	2		F R A C T I O N S	Ratios and proportions	The learner: - relates new and old ratios - finds the ration decrease - shares quantities in ratio	- reads statements - pronounces words correctly. - write given works	Finding the ratio of decrease. Example The number of pupils in a class has decreased from 40 to 35. In what ratio has the number decreased? New : Old / 35 : 40 / 35 / 40 / 7 / 8 / = 7:8	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation / Discussion / Guided discovery Question and answer	Finding ratio decrease	Chalkboard illustrations	Mk Maths book 6 page 132 Primary Six curriculum page 162	
	2		F R A C T I O N	Ratios and proportions	The learner: - relates new and old ratios - finds the ration decrease	- reads statements - pronounces words correctly. - write given works	Sharing quantities in ratios. Example Share sh. 2000 in the ratio 2:3 Total ratio (2+3 = 5) 1st share 2 x 2000/400 / 5/1 / 2 x 400 = sh. 800/= 2nd share 3 x 2000/400 / 5/1	**Effective communication** confidence **Problem solving** taking decision	Explanation / Discussion Guided discovery	Sharing Quantities in ratios	Chalkboard illustrations	MK Maths book 6 page 133 Primary Six curricul	

					- shares quantities in ratio		3 x 400= sh. 1200/=	**Values** Co-operation appreciation	Question and answer			um page 162	
	3	S	FRACTIONS	Ratios and proportion	The learner: - finds the total ratio - solves word problems in ratio - carries out division	- reads and interprets statements - writes ration	Application of ratios in solving problems. Example Maria, Mariam and Mary shared 36 oranges in the ratio 1:2:3 respectively. Find the number of oranges each girl got. Total ratio (1+2+3=6) Maria got $\frac{1}{6} \times 36$ 1 x 6 = 6 oranges Mariam got $\frac{2}{6} \times 36$ 2 x 6 = 12 oranges Mary got $\frac{3}{6} \times 36$ 1 x 18 = 18 oranges	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Guided discovery Question and answer	Solving word problems	Chalk board illustrations	Mk Maths book 6 page 134 Primary Six curriculum page 162	
	4		FRACT	Ratios and proportions	The learner: - finds the number shared when given	- reads and interprets the statement	Finding the number shared when given ratios. Example. The ratio of males to females in a group is 2:3. If there are 20males,	**Effective communication** confidence	Explanation Guided discovery	Finding shared number when	Chalk board illustrations	Mk Maths book 6 page 135	

			I O N S		ratios involving	- pronounces the words correctly. - writes ratios	how many people are in the group? M:F 2:3 (2 + 3= 5) 20:? 2 parts represent 20 1 part represents $\frac{20}{2}$ 5 parts represent $\frac{20}{2} \times 5$ 10 x 5 = 50 people	**Problem solving** taking decision **Values** Co-operation appreciation	Question and answer Market stall	given ratios		Primary Six curriculum page 162	
			F R A C T I O N S	Ratios and proportions	The learner: - finds the number shared when given ratios involving	- reads and interprets the statement - pronounces the words correctly. - writes ratios	Simple proportion **Examples** 1. A book costs sh. 800/=. What is the cost of such books? 1 book costs sh. 800/= 6books cost sh. 800 x 6 Sh.4800/= 2. 10 eggs cost sh. 6000/=. Find the cost of 1 egg. 10 eggs cost sh. 6000/= 1 egg costs sh. 6000 ⁄ 10 ⁄ Sh. 600/=	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Explanation Guided discovery Question and answer	Solving numbers in simple proportion	Chalkboard illustrations	MK Maths book 5 page 238-239 Primary Six curriculum page 162	
	5		F R A C	Ratios and proportions	The learner: - solves numbers involving	- reads and interprets	Direct proportion. Example	**Effective communication** confidence	Discussion Explanation	Working out numbers	Chalkboard illustration	Mk Maths book	

			T I O N S		simple proportion. - solves numbers involving direct proportion	the statement. - writes numbers involving proportion.	4 pens cost 2000/=.What is the cost of 7 similar pens? 4 pens cost shs. 2000/= 1 pen costs shs. 2000 4 500 7 pens cost sh. 2000 x 7 4 1 500 x 7= Shs. 3500/=	**Problem solving** taking decision **Values** Co-operation appreciation	Question and answer Brain storming	involving direct proportion.		page 137 Primary Six curriculum page 162	
	6		F R A C T I O N	Ratios and proportions	The learner: - solves numbers involving inverse proportion. - gives examples of constant proportion - relates ratios which are constant	- reads and interprets the statement - pronounces the words correctly.	Inverse proportion **Example** 1. 3men can do a piece of work in 6 days. How long will 9 men take to do the same job? 3 men take 6 days 1 man takes 6 x 3 days 9 men take 6 x 3 9 3 1 2 days Constant proportion It takes 5 minutes for 6 bottles of soda to get cold in a deep freezer. How long would 10 similar bottles take to get cold put in the same freezer? 6 bottles take 5 minutes 1 bottle takes 5minutes 10bottles take 5 minutes	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer	- Working out numbers involving inverse and constant proportion	Chalkboard illustrations	Mk Maths book 6 pages 138-139 Primary Six curriculum page 162	

	7		FRACTIONS	Percentage	The learner: - expresses fractions as percentages. - expresses decimals as percentages. - expresses percentages as decimals.	- reads and spells percentages - writes the symbols for percentages	Meaning of percentage -Is a fraction whose denominator is 100. -percent means every hundred. -% is the symbol for percentages. 1) Expressing fractions as percentages. **Examples** Change to percentage 1) ½ Method: Multiply by 100% = ½ x 100% = 1 x 50% = 50% 2) 0.7 = 7 x 100% 10 = 7 x 10% = 70% 2) Expressing percentages as fractions. E.g. Express 25% as a fraction 25% = 25 = 1	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer	Expressing fractions as percentage and viceversa	Chalkboard illustrations	Mk Maths book 6 page 142-143 Primary Six curriculum page 162	
5	1	1004	FRACTIO	Percentage	The learner: - expresses ratios as percentages.	- reads and spells percentages - writes the symbols for	Expressing ratios as percentages. **Example** 1. Express 2:5 as a percentage. 2:5 = 2 5 20 = 2 x 100% 5 1	**Effective communication** confidence **Problem solving**	Discussion Explanation	Expressing ratios as percentage	Chalkboard illustrations	Mk. Maths book 6 page 145	

			N S		- expresses percentages as ratios - changes percentages to decimals	percentages.	=2 x 20% = 40% Expressing percentage as ratios. **Example** 1. Express 40% as a ratio. 40% = 40/100 = 4²/10₅ = 2/5 = 2.5	taking decision **Values** Co-operation appreciation	Question and answer Brain storming	Expressing percentage as ratios.		Maths Revision handbook Primary Six curriculum page 162.	
			F R A C T I O N S	Percentage	The learner: - expresses ratios as percentages. - expresses percentages as ratios - changes percentages to decimals	- reads and spells percentages - writes the symbols for percentages.	Changing percentages to decimals. Example 1. Express 20% as a decimal. 20% = 20/100 = 2/10 =0.2	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer			Mk. Maths book 6 144 Primary Six curriculum page 162	
	2		F R A C T	Percentage	The learner: - finds parts of percentages.	- reads and interprets statements.	Finding parts of a percentage. Example 1. 80% of the class are boys. What percentage are girls? Whole class = 100%	**Effective communication** confidence	Discussion Explanation	Finding parts of a percentage	Chalkboard illustrations	Mk. Maths book 6 page 146	

			I O N S			- writes the symbols for percentage	%for boys =80% %for girls = 100% - 80% = 20%	**Problem solving** taking decision **Values** Co-operation appreciation	Question and answer Think, pair & share			Primary Six curriculum page 162	
	3		F R A C T I O N S	Percentage	The learner: - compares quantities using percentages. - finds quantities equivalent	- reads and interprets the statements. - writes the symbols for percentage	Comparing quantities using percentages. **Example** 1. There are 20% more girls in the class. What is the percentage of a) boys? **Girls** | **boys** | **Total** (x+20)% | x% | 100% X + x + 20% = 100% 2x + 20% = 100% 2x+ 20%-20% =100%-20% ~~2~~x = ~~80%~~ ~~2~~ 2 X = 40% Boys % = x = 40% Girls % = x + 20% = 40% + 20% = 60%	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer	Comparing quantities using percentages	Chalkboard illustrations	Mk. Maths book 6 page 147 Understanding Mathematics book 6 page 116	

	4	on	FRACTIONS	Percentage	The learner: - applies percentages in sharing.	- reads and interprets the statement. - pronounces the key words correctly.	Finding quantities equivalent percentages. Example 1. What is 20% of sh. 2500? 20% of 2500 20% x 2500 $\frac{20}{100} \times \frac{2500}{}$ 2 x 250 Sh. 500/=	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer Think, pair & share	Finding quantities equivalent to percentage	Chalkboard illustrations	Mk. Maths book 6 page 150 Primary Six curriculum page 162	
			FRACTIONS	Percentage	The learner: - applies percentages in sharing.	- reads and interprets the statement. - pronounces the key words correctly.	Sharing quantities using percentages Example 1. In a school of 400 pupils, 30% are boys. a) How many boys are in the school? 30% x 400 30 x 400 100 30 x 4 = 120boys. b) Find the number of girls in the school. 100% - 30 % =70%	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer			Mk. Maths book 6 page 151 Primary Six curriculum page 162	

							70% x 400= 70 x 400 100 7 x 40 = 280 girls						
	5		FRACTIONS	Percentage	The learner: - solves equations involving percenatges	- reads and interprets the statement. - writes percentages.	Forming and solving equations involving percentages. Example 1. 10% of a number is 40. Find the number. Let the number be y. 10% of y = 40 10% x y = 40 10 y = 40 100 1 100 x 10y = 40 x 100 100 10y = 40 x 100 10 10 Y = 4 x 100 Y = 400	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer Market stall	Forming and solving equations involving percentage	Chalkboard illustrations	Mk. Maths book 6 page 152 Primary Six curriculum page 162	
	6		FRACTION	Percentage	The learner: - relates 100% in increasing percentages. - solves quantities	- reads statement - writes the statements	Percentage increase and decrease Example 1. Increase shs. 2000/= by 20%. 100% + 20% = 120% 120% x 2000 120 x 2000 100 12 x 200	**Effective communication** confidence **Problem solving**	Discussion Explanation	Increasing and decreasing quantities by given	Chalkboard illustrations	MK. Maths book page 153 and 155	

			S		involving percentages increase. - solve quantities involving percentage decrease.		= 2400/= 2. Decrease 3000 by 10% 100% - 10% = 90% 90% x 3000 9 x 300 90x 3000 2700 100	taking decision **Values** Co-operation appreciation	Question and answer	percentage		Primary Six curriculum page 162	
	7		FRACTIONS	Percentage	The learner: - finds the percentages decrease	- reads the statements - writes the statements.	Finding percentage increase. **Example** When 600 is increased by x%, it becomes 660. Find the value of x. New no – Old no 660 – 600 = 60 % increase = Diff x 100% Old no. = 60 x 100% 600 X = 10%	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer Brain storming	Finding percentage increase	Chalkboard illustrations	Mk. Maths book 7 page 122 Primary Six curriculum page 162	
			FRACTIO	Percentage	The learner: - finds the percentages decrease	- reads the statements - writes the statements.	Finding percentage decrease Example When sh. 1200/= is decreased by y%, it becomes shs. 900/=. Find the value of y. Sh. 1200 – sh. 900 = 300/=	**Effective communication** confidence **Problem solving**	Discussion Explanation	Finding percentage decrease	Chalkboard illustration	Mk Maths book 6 page 156 Primary Six	

			N S				~~300~~ x 100%25 ~~1200~~ ~~4~~ = 25%	taking decision **Values** Co-operation appreciation	Question and answer			curriculum page 162	
6	1		F R A C T I O N S	Percentage	The learner: - forms equations - finds old number after increase	- reads the statements - writes the statements	Find old number after increase. **Example** What umber when increased by 20% becomes 360? **Method 1** Forming equations Let the number be x 100% + 20% = 120% 120% of x = 360 120 x X = 360 100 120x = 360 100 1 100x 120x = 360 x 100 100 120x = 360 x 100 120 120 X = 3 x 100 X= 300 **Method II** New % = 100% + 20% = 120%	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer	Finding old number after increase	Chalkboard illustrations	Functional Primary Mathematics book 6 page 111 Primary Six curriculum page 162	

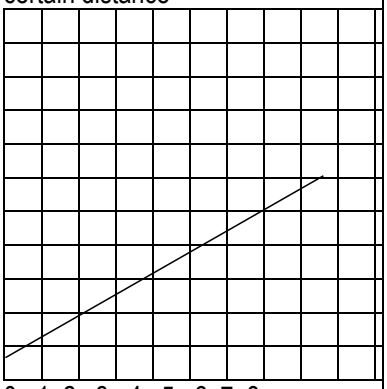
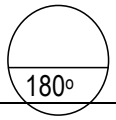
							120% represents 360 1% represents 360/120% 100% repr. 360 x 100/120% 3 x 100 =300						
	2		FRACTIONS	Percentage	The learner: - forms equations - finds old number after	- reads the statements - writes the statements	Finding old number after decrease **Example** 1. What number when decreased by 25% becomes 900? New % = 100% - 25% =75% 75% repr. 900 1% repr. 900/75% 100% repr. 900 x 100/75% 300 x 4 = 1200	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Guided discovery Explanation Question and answer	Finding old number after decrease	Chalkboard illustrations	Mk. Maths book 6 page 155-156 Primary Six curriculum page 162	
	3		FRACTIONS	Percentage	The learner: - applies percentage to loss, cost price and selling price. - finds loss and profit	- describes profits, loss price and selling price. - reads the statements - writes the statements	Application of percentage -cost price, selling price and cost price. **Example** 1. Pamella bought a book at sh.300/= and sold it at sh. 400/=. Find her profit. Profit = selling price – cost price P = s/p –c/p	**Effective communication** confidence **Problem solving** taking decision **Values**	Discussion Guided discovery Explanation	Finding profit	Chalkboard illustrations	Mk. Maths book 6 page 157 Primary Six curricul	

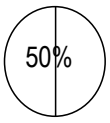
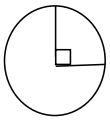
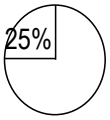
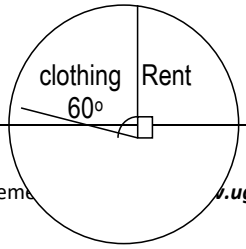
					- finds percentage profit and loss		Shs. 400/= Shs. 300/= Shs. 100/=	Co-operation appreciation	Question and answer			um page 162	
			F R A C T I O N S	Percentage	The learner: - applies percentage to loss, cost price and selling price. - finds loss and profit - finds percentage profit and loss	- describes profits, loss price and selling price. - reads the statements - writes the statements	Finding percentage profit Example My sister bought a pen at shs. 1600/= and sold it at sh. 2000/= Find the percentage profit. % profit = Profit x % c/price P = S/P – C/p Sh. 2000/= Sh. 1600/= Sh. 400/= %profit = 400 x 100% 1600 = 25 %	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation appreciation	Discussion Explanation Question and answer	Finding percentage profit	Chalkboard illustrations	Mk. Maths book 6 page 157 Primary Six curriculum page 162	
	4		F R A C T I O N S	Percentage	The learner: - finds loss when given selling price - finds loss percentage	- reads the statements - writes the statements	Finding loss **Example** 1. Nsubuga sold a cow at sh. 250,000/= which he bough at sh. 300,000/=. How much loss did he make? Loss=cost price-selling price 300000- 250000 Sh. 300000/= Sh. 250000/= Sh. 50,000/=	**Effective communication** confidence **Problem solving** taking decision **Values**	Discussion Demonstration Explanation	Finding loss	Chalkboard illustrations	Understanding maths book 6 Primary Six curriculum page 162	

								Co-operation Appreciation	Question and answer				
	4	on	FRACTIONS	Percentage	The learner: - finds loss when given selling price - finds loss percentage	- reads the statements - writes the statements	Finding percentage loss. **Example** Monica bought a book at 35,000/= and sold it at sh. 32,000/= Find the percentage loss. % loss = l x 100% c/p l = c/p – s/p sh. 35,000/= sh. 30,000/= sh. 3,000/= 8 rem 4 3000 x 100 35,000 7 1 = 8 4/7%	**Effective communication** confidence **Problem solving** taking decision **Values** Co-operation Appreciation	Discussion Demonstration Explanation Question and answer	Finding percentage loss	Chalkboard illustrations	Understanding Mathematics book 6 Primary Six curriculum page 162	
	5		FRACTION	Percentage	The learner: - finds simple interest - finds amount	- describes simple interest and relates it in day to day life. - reads and	Finding simple interest Example A farmer deposited sh. 120,000/= in a bank that offers an interest rate at 10% per years. How much interest will he after 2 years? SI P x R x T = 120,000 x 10 x 2 100	**Effective communication** confidence **Problem solving**	Discussion Explanation	Finding simple interest and amount	Chalkboard Illustrations	Primary Maths for Uganda book 6 page 75-76	

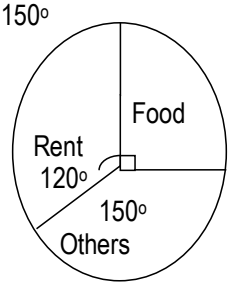
			S			interprets the statements	= 12000 x 2 = sh. 24,000/= Finding amount. Example A trader borrowed sh. 400,000/= from a bank at an interest rate of 5% per annum. Find the amount he got after 6months. A = P + SI =400,000 + 2000x 5 x 6 100 12 =400000 + 2000 x 5 = 400000 + 10000 sh. A = 410,000 400000 + 10000 410,000	taking decision **Values** Co-operation appreciation	Question and answer			Mk Maths book 6 page 159 Primary Six curriculum page 162	
E.L.O: The learner represents and interprets simple mathematical data in various forms.													
		GRAPHS AND INTERPRETATION OF INFORMA	DATA HANDLING	Types of graphs	The learner: - forms tables from the given information/ data	- names types of graphs - reads and interpretes data presented on tables.	Types of graphs. - Picto graphs - Bar graphs -line graphs - pie charts -collection of data **Example** A class was asked the type of food they liked most. Their answers were as follows:	Creative thinking Logical thinking Problem solving Taking decision Making choice Values	Discussion Explanation	- Naming graphs - collecting data - drawing tables	A bar graph on the chart Chalk board illustrations	Mk. Maths book 6 page 164-165 P.6 curr. pg 166-167	

	6	TIO N					10 liked matooke, 12 liked posho, 6 liked millet, 8 liked rice, 4 liked cassava and 8 liked yams. Put the above information in a table. Ty of food | Mat. | Posho No.of pup | 10 | 12 Millet | Rice | cassava | yams 6 | 8 | 4 | 8	Co-operation appreciation	Demonstration Question and answer				
	7	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Picto-graph	The learner: - draws picto-grapds - works out equations involving pictographs	- reads and interprets the given data - writes the given data	Picto-graph Example The graph below shows the number of cars that pass through Mbeya village from Monday to Friday. DAY | NUMBER OF CARS MON | △△△△△ TUE | △ △ WED | △ △ △ THU | △△△ △ △△ FRI | △ △ △ △ Scale : △ represents 10 cars. **Questions:** 1. How many cars passed through the village on Thursday?	Creative thinking Logical thinking Problem solving Taking decision Making choice Values Co-operation appreciation	Explanation Illustration Demonstration Discussion Question and answer Brain storming	-Drawing graphs. -Answering questions involving graphs	A chart showing Picto-graph	Mk Maths book 6 page 163 P.6 curr. pg 166-167	
7	1		**DATA**	Line graph	The learner: - draws line graph	- reads and interprets	Line graph	Creative thinking	Explanation	-Drawin	A chart showi	MK Maths	

			HANDLING		- answers written questions about line graphs.	the line graphs. - writes the given data	The graph shows litres of petrol consumed by a car through a certain distance  	Logical thinking Problem solving Taking decision Making choice Values Co-operation appreciation	Ilustration Demonstration Discussion Question and answer	g graphs - Answering questions about line graphs.	ng line graphs	book 6 page 7 P.6 curr. pg 166-167	
	2	**GRAPHS AND INTERPRETATION OF INFORMA**	**DATA HANDLING**	Piecircle graphs	The learner: - draws circle graphs and represents regions on them - shades required regions	- reads and interprets the given data. - describes pie charts - names pie charts	Pie charts: Piecharts are circle graphs. -Pie charts are used to organize information using either fractions, decimals, degrees or percentages. -The angle sum of a circle graph is 360^o. Example Draw and shade given regions in a circle graph. ½ x 360^o = 180^o  	Creative thinking Logical thinking Problem solving Taking decision Making choice Values Co-operation	Explanation Discussion	Drawing circle graphs - shading regions in circle graphs	Drawn and shaded circle graphs	Mk Maths book 6 page 178-179 P.6 curr. pg 166-167	

		TIO N					½ x 100% = 50%  ¼ x 360° = 90°  ¼ x 100% =25% 	appreciation	Guided discovery Market stall				
	3	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Pie-charts	The learner: - solves problems involving circle graphs	- reads the statements - interprets data - writes the statements	Solving problems involving piecharts Example The pie-chart below shows how a man spends his salary of sh. 180,000/= 	<u>Creative thinking</u> Logical thinking <u>Problem solving</u> Taking decision Making choice <u>Values</u> Co-operation	Explanation Discussion	Working out questions involving pie charts	A chart showing a pie chart	Mk Maths book 6 page 180-183 P.6 curr. pg 166-167	

							Fees x / 110° Food a) Find the value of x. $x + 60^o + 90^o + 110^o = 360^o$ $x + 150^o + 110^o = 360^o$ $x + 260^o = 360^o$ $x + 260^o - 260^o = 360^o - 260^o$ $x = 100o$ b)How much more money does he spend on fees than clothing? Fees-clothing $100^o - 60^o = 40^o$ $360^o \quad 360^o \quad 360^o$ 40 x 180000/= 360 Sh. 20000/-more.	appreciation	Guided discovery Brain stomring				
	4	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Construction of pie charts	The learner: - calculates degrees from givens fractions. - measures angles for given pie charts.	- reads the statements - interprets data - writes the statements	Construction of pie –charts Example A man spends his money as follows: ¼ on food $^1/_3$ on rent and $^5/_{12}$ on others. Show this information on a pie-chart. Food: ¼ x $360^o = 90^o$ Rent: 1/3 x $360^o = 120^o$	<u>Creative thinking</u> Logical thinking <u>Problem solving</u> Taking decision	Explanation Illustration Discussion	Constructing accurate pie-charts from given information	Chalkboard illustrations	Mk Maths book 6 page 184 - 186 P.6 curr.	

					- construct angles		Others: 5 x 360^o =5 x30^o 12 = 150^o  	Making choice Values Co-operation appreciation	Question and answer Brain storming			pg 166-167	
	5	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Simple statistics	The learner: - differentiates mode from modal frequency. - work out numbers involving mode and modal frequency	- reads the statements - describes mode, modal frequency and range. - writes mode and modal frequency	Mode: Mode is the commonest number in the given data Example A boy obtained the following in a series of tests: 8, 2, 6, 4, 5, 6, 9,6, and 2 a) Find his modal mark **No.** | **T** | **F** 8 | 1 | 1 2 | 11 | 2 6 | 111 | 3 5 | 1 | 1 9 | 1 | 1 4 | 1 | 1 6 appears most, so 6 is the modal frequency. Is the number of times	Creative thinking Logical thinking Problem solving Taking decision Making choice Values Co-operation appreciation	Guided discovery Explanation	Calculating numbers involving mode, modal frequency and range.	Class room situation Chalk board illustration	Mk Maths book 6 page 169-170 P.6 curr. pg 166-167	

							the mode appears. In the above number, 3 is the modal frequency. **Range:** Range is the difference between the highest and the lowest items in given information. **Example** Musa scored the following marks in a series of tests 50, 20, 30, 75, 30, 80, 20, 30, 30, 50, 75, 80 Find the range mark. R = H – l = 80 – 20		Discussion Think, pair & share				
	6	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Simple statistics	The learner: - arranges items in both ascending and descending order. - calculates the median - calculates the mean	- reads and interprets the statement. - writes the statement	**Median:** is the middle number got after arranging in either ascending or descending order. **Example** Given 7, 3,2, 6, 8 and 4, find the median 7, 3, 2, 6, 8, 4 = 2, 3, 4, 6, 7, 8 = 4 + 6 2 = 10	<u>Creative thinking</u> Logical thinking <u>Problem solving</u> Taking decision Making choice <u>Values</u> Co-operation appreciation	Guided discovery Explanation Demonstration Discussion	Finding median of given data.	Chalk board illustrations	Mk Maths book 6 page 170 P.6 curr. pg 166-167	

							$= \frac{2}{5}$						
	6	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Simple statistics	The learner: - arranges items in both ascending and descending order. - calculates the median - calculates the mean	- reads and interprets the statement. - writes the statement	Arithmetic mean or average M = SII / NII Example Find the mean of the first three even numbers. M = SII / NII $= \frac{0 + 2 + 4}{3} = \frac{6}{3}$ $= 2$	Creative thinking Logical thinking Problem solving Taking decision Making choice Values Co-operation appreciation	Guided discovery Explanation Demonstration Discussion Think, pair & share	Calculating mean in given data	Chalk board illustrations	MK Maths book 6 page 171. Functional Primary Mathematics book 6 page 119	
	7	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Simple statistics	The learner: - forms correct equations - solves for the unknown	- reads and interprets given information. - writes the statements	Inverse problems on average Example The average of 4 numbers is 13. Three of them are 9, 12 and 10. Find the fourth number. Let the fourth number be k. $\frac{K + 9+12 + 10}{4} = 13$ $\frac{K + 31}{4} = \frac{13}{1}$ $\frac{4 \times k + 31}{4} = 13 \times 4$	Creative thinking Logical thinking Problem solving Taking decision Making choice Values	Guided discovery Explanation Question and answer	Solving word problems involving average	Chalk board illustration	Mk Maths book 6 page 173 P.6 curr. pg 166-167	

							K + 31 = 52 K+31-31 - 52-31 K = 21	Co-operation appreciation	Discussion				
8	1	**GRAPHS AND INTERPRETATION OF INFORMATION**	**DATA HANDLING**	Simple statistics	The learner: - solves word problems involving average/ mean	- reads and interprets the statements. - writes the statements	More about average. Example The average of 4 numbers is 6 and the mean of 4 other numbers is 8. Find the mean mark of all 8 numbers. Total mark of 4 numbers = 4 x 6 = 24 Total mark of 4 other numbers = 4 x 8 = 32 Average mean of 8 numbers A = SII NII = 24 + 32 8 = 56 8 = 7	Creative thinking Logical thinking Problem solving Taking decision Making choice Values Co-operation appreciation	Guided discovery Explanation Gallery walk Question & answer Discussion	Solving word problems involving average	Chalkboard illustrations	Mk Maths book 6 page 173 P.6 curr. pg 166-167	
E.L.O: The learner exchanges money from one currency to another and explains why conversion of money is done.													
	2	**MEASUREMENTS**	**MONEY**	**Buying and selling**	The learner: - finds the total expenditure. - calculates change	- reads and comprehend statements.	Buying and selling Example Rose had sh. 5000/= and bought 1 ½ kg of beans at sh. 600/= each kg, 500gm of salt at sh.700/=@ kg, and 2 bars of soap at sh. 1400/=	Effective communication fluency confidence	Guided discussion	Shopping	Money Items in the shop.	Mk. Maths book 5 page 240 and Mk	

						- uses words like expenditure and change correctly.	a) How much money did she spend altogether? **Beans** **Salt** 1 ½ x 600 500 x 700 1000 3 x 600 2 3 x 300 50 x 7 Sh. 900/= shs. 350/= **Soap** 2bars for sh. 1400/= Total: sh. 900/= Sh. 1350/= +Sh. 1400/= Sh.2650 b)Calculate her change. Sh. 5000-sh. 2650= sh. 2350/= SW Sh. 5000/= -sh. 2650/= Sh. 2350/=	Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Question and answer Explanation Market stall	Visit to the canteen Chalkboard illustration	Chalk board illustrations	Maths book 6 page 213 – 214 P.6 curr pg 171-172	
	3	**MEASUREMENTS**	**MONEY**	**Completing bills**	The learner: - studies the bills - identifies the missing parts in a bill.	- reads and comprehends statements - uses words like	Completing bills Example Study and complete the bill correctly. Item qty unit C amount Sug 4kg 1200/= 4800/= Soap 2brs 700/= 1400/=	Effective communication fluency confidence Problem solving	Explanation Discussion	Completing tables by multiplying, dividin	Chalk board illustrations	Mk. Maths book 6 page 215-216	

					- completes the shopping bills correctly.	expenditure and bills correctly.	c.oil 3litres 1500/= 4500/= Shs 107,000/= Sugar soap oil 4x1200 1400 4500 2 1500 Sh.4800/= 700/= 3litres	taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Question and answer Brain storming	g and adding.		P.6 curr pg 171-172	
	4	**MEASUREMENTS**	**MONEY**	**Currencies**	The learner: - draws a table for exchange rate. - copies notes	- names money or currencies for different countries - reads and uses the vocabulary correctly.	Money Uganda and other currencies Country currency Uganda Uganda shilling Kenya Kenya shilling Tanzania Tanzania sh. Rwanda Rwanda Franc Zambia Kwacha S.Africa Rand USA US dollar Britain Pound Sterling Japan Japanese Yen European Union Euro German Deutcsh Mark Rates	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others	Explanation Guided discovery Question and answer Brain storming	Field trip to Forex Bureau	Table of exchange rates	Mk Maths book 6 page 219 P.6 curr pg 171-172	

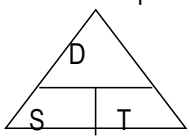
							Currencies buying selling 1 Pound 2500 2550 1 Us $ 1700 1720 1K.shs. 19 20 1 Rw.F 1.9 2.2 1Euro 1520 1560 1 TZ 1.6 2	caring for others					
	5	**MEASUREMENTS**	**MONEY**	**Exchange rates**	The learner: - converts Uganda currency to other currencies and viceversa. - describes steps of converting one currency to another verbally.	- reads, counts and writes currency rates correctly.	Uganda and other currencies Example The exchange rate in Kenya for Uganda shilling is 1kshs= 25 ug shs. How much Ug. Shs will Kassim get from his 250 ksh? 1sh = 25Ug. Shs 250Ksh.= 250x 25 = 6250/= (Ug)	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Explanation Guided discovery Question and answer Discussion Brain storming	Converting currencies	Chalkboard illustrations	Mk. Maths book 6 page 219 - 221 P.6 curr pg 171-172	
	6	**MEASUR**	**MO**	**Finding numb**	The learner: - calculates the amount	- reads and comprehe	Uganda currency. Uganda currency includes coins and bank notes.	Effective communication	Explanation	Finding number of	Bank notes	Mk. Maths book 6	

		EMENTS	**NEY**	**er of notes**	of money in a bundle. - counts bank notes	nds given statements. - writes the given statements	Example Banks notes are in a bundle numbered from AP003782,to AP003881. a) How many notes are in the bundle? AP003881 AP003782 99 Formula used is n + 1 N represents notes found in the range. = 99+ 1 =100 notes b)If each note is sh.500/= how much money is in the bundle? 1note = sh. 5000/= 100 notes –Sh.5000x 100 = sh. 500,000/=	fluency confidence <u>Problem solving</u> taking decision <u>Values</u> co-operation self esteem <u>Interpersonal relation</u> forgiving others caring for others	Guided discovery Question and answer Discussion Think, pair & share	notes in a bundle. - calculating amount of money in a bundle.	Chalk board illustrations	page 218 P.6 curr pg 171-172	
	7	**MEASUREMENTS**	**Distance time & sp**	**TIME**	The learner: - measures time - changes hours to minutes - reads the clock face.	- reads and comprehends given statements. - writes hours, minutes	Conversion of time from one unit to another unit. -Relationship of units 1hour = 60minutes 1minute =60 seconds 1 hour = 3600 seconds Examples 1. Change 4 hours to minutes 1 hour = 60min 4hours= 60 x 4min	<u>Effective communication</u> fluency confidence <u>Problem solving</u> taking decision <u>Values</u>	Explanation Demonstration	Relating units changing hours to minutes	Clock face Chalk board illustrations	Understanding Mathematics book 6 MK Maths book 6	

			eed			and seconds	= 240 min 2. Change 4 minutes to seconds 1min =60 seconds 4min = 60 x 4 = 240 seconds 3.How many seconds are there in 1 hour? 1hr = 60 min 1min = 60 sec 1hr = 60 x 60 = 3600 seconds	co-operation self esteem Interpersonal relation forgiving others caring for others	Question and answer	changing minutes to seconds Changing hours to seconds		page 222 P.6 curr pg 171-172	
9	1	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - changes minutes to hours. - changes seconds to hours.	- reads units used to measure time. - writes units used to measure unit.	Conversion of time -Changing minutes to hours Example Change 360 minutes to hours 60min = 1hr 1min = 1/60 360 min = 1/60 x 360 = 6hours Changing seconds to hours Example Change 18000 seconds to hours 3600 sec = 1hr 1sec = 1/3600 18000 sec = 1 x 18000	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others	Explanation Discussion Question and answer Gallery walk	Expressing minutes and seconds to hours.	Chalkboard illustrations	Mk Maths book 6 page 223 P.6 curr pg 171-172	

							3600 = 5hours	caring for others					
	2	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - identifies durations - calculates duration between hours.	- reads the units - writes statements	Duration Duration is time taken to complete an activity. Example How many hours are there between 2:30 am and 9:00a.m? 9:00am -2:30am 6:30=6hrs 30min	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Explanation Discussion Question and answer Market stall	Finding duration	Chalkboard illustrations	Mk Maths book 6 page 224-225 Understanding Maths book 6 P.6 curr pg 171-172	
	3	**MEASUREMENTS**	**Distance time &**	Time	The learner: - changes 1200hour time to 2400 hour time. - adds 1200hrs or 0000hrs	- reads anti-meridian (a.m) and prime meridian (p.m)	Changing 1200hour time to 2400hour time Examples Changes to 2400hour time 1)7:10am If it is in am, add 0000hrs. 7:10am +00:00hrs	Effective communication fluency confidence Problem solving	Explanation Guided discussion	Changing 1200 hour time to 2400hour time	Chalkboard illustrations	Mk Maths book 6 page 199 P.6 curr pg	

			speed			- writes anti meridian and prime meridian	07:10hrs 2) 7:10pm If it is in pm, add 1200 hours 7:10pm +12:00hrs 19:10 hrs	taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Question and answer Brain storming			171-172	
	4	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - changes 2400 time to 1200 hour time - subtract 1200hrs or 0000 brs	- reads and writes time in a.m or p.m - writes time in a.m and p.m	Changing 2400 hour time to 1200hour time **Example** 1) change 0025 hours to 1200hour time. 0025hrs +1200hrs 1225 = 12:25am 2)Express 1450 hours as 12hour clock system. 1450hrs 1200hrs 250 = 2:50pm	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem forgiving others caring for others	Explanation Guided discussion Question and answer Brain storming	Changing 2400 hour time to 1200 hour time	A chart showing the 1200 hour time and 2400 hour time	Mk. Maths book 6 page 200 P.6 curr pg 171-172	

	5	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - finds the directions of time from a.m to p.m and from p.m to a.m	- reads and writes the statements - writes duration in hours.	Duration of time with am and pm Example My sister was sleeping from 4:00am to 3:00pm. For how long was my sister sleeping? 3:00pm } change both am 4:00am } and pm to 2400 Hour time 3:00pm 4:00am +12:00hrs +00:00hrs 15:00hrs 04:00hrs 1500hrs -0400hrs 1100	Effective communication confidence Problem solving taking decision Values self esteem Interpersonal relation forgiving others caring for others	Explanation discussion Question and answer Think, pair & share	Finding duration	Chalk board illustration	Mk. Maths book 6 page 224-225 P.6 curr pg 171-172	
	6	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - applies formula to find distance - finds distance	- reads and writes the statements . - writes duration in hours	Finding distance Example Find the distance travelled by a car in 2hours at a speed of 60km/hr  D = S x T = 60km/hr x 2hrs = 120km	Effective communication fluency Problem solving taking decision Values co-operation Interpersonal relation	Explanation Guided discussion Question and answer Problem solving	Finding distance when given time and speed	Chalk board illustrations	P.6 curr pg 171-172	

								forgiving others					
	7	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - finds duration between departure and arrival. - solves problems to find distance	- reads and interprets the statements - writes the statements	Finding distance Example A bus which travels at 50km/hr leaves Mbarara at 7:30am and arrives at Mbale at 1:30p.m. What is the distance between Mbarara and Mbale? D = S xT Time from Mbarara to Mbale is missing T = 1:30pm change to 2400hour Clock -7:30am 1:30pm 7:30am +12:00hrs +00:00hrs 13:30hrs 07:30hrs 1330hrs -0730hrs 600= 6hrs D= S x T = 50km/hr x 6hrs = 300km	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Explanation Guided discussion Question and answer Problem solving Market stall	Finding - duration - distance	Chalk board illustrations	Mk Maths book 6 page 230 P.6 curr pg 171-172	
10	1	**MEASUREM**	**Distance**	Time	The learner: - identifies units used for time.	- reads, spells and writes the word time	Time: Finding time Example	Effective communication fluency	Explanation	Finding time	Chalk board illustr	Mk Maths book 6	

		ENTS	**time & speed**		- finds time when given distance and speed.		How long will a car take to cover a distance of 120km at a speed of 40kph? T = D S =120km 40 =3hrs	Problem solving taking decision Values self esteem Interpersonal relation forgiving others	Guided discussion Question and answer Problem solving		ations	page 231 P.6 curr pg 171-172	
	2	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - identifies units used to measure speed. - applies formula to find speed.	- reads, spells and writes the word time	- reads and interpretes the statement. - writes the statement	Effective communication confidence Problem solving taking decision Values self esteem Interpersonal relation caring for others	Explanation Guided discussion Question and answer Problem solving	Calculating for speed	Chalkboard illustrations	Mk Maths book 6 page 234-235 P.6 curr pg 171-172	

	3	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - relates units e.g km to ms - expresses speed from km/hr to m/second	- reads units used to measure speed. - names units. - writes correct units.	Expressing kilometers per hour to metres per second Example Express 72km/hr as m/second 1km = 1000ms 1hr = 3600sec =72 x 1000m 1 x 3600sec = 2 x 10m 1 sec = 20m/sec	Effective communication fluency Problem solving taking decision Values self esteem Interpersonal relation forgiving others	Explanation Guided discussion Question and answer Problem solving	Expressing speed from km/hr to mps	Chalkboard illustrations	Mk. Maths book 6 page 236-237 P.6 curr pg 171-172	
	4	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - relates units - expresses speed from metres per second to kilometer per hour.	- reads units used to measure - writes correct units.	Expressing metres per second to kilometers per hour Example Change 20m/sec to km/hr 1km = 1000m 1hr = 3600sec $\frac{20}{1000} \div \frac{1}{3600}$ $\frac{20}{1000} \times \frac{3600}{1}$ = 2 x 36 = 72kph	Effective communication fluency Problem solving taking decision Values co-operation self esteem Interpersonal relation	Explanation Guided discussion Question and answer Problem solving	Changing speed from m/sec to km/hr	Chalkboard illustrations	Mk Maths Book 6 page 237 P.6 curr pg 171-172	

								forgiving others					
	5	**MEASUREMENTS**	**Distance time & speed**	Time	The learner: - calculates the average speed. - adds time - adds distance	- reads and intereprets the statements - writes the statement	Average speed Finding average speed Example A car takes 3 hours to cover a certain journey of 60km/hr and takes hours to return. Calculate its average speed. 1st journey (going) D = S x T = 60kph x 3hrs = 180km Return (coming back/same journey) S = D T = 180km 2hrs = 90kph A/S = T/D/C T/T/T = 180km + 180km 3hrs + 2hrs = 360 5hrs = 72 km/hr	Effective communication fluency confidence Problem solving taking decision Values co-operation self esteem Interpersonal relation forgiving others caring for others	Explanation Discussion Question and answer	Calculating average speed	Chalkboard illustrations	Mk Maths book 6 page 238 P.6 curr pg 171-172	