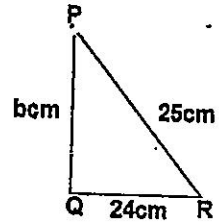
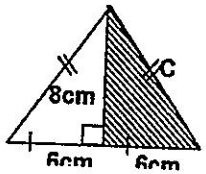
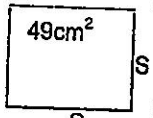
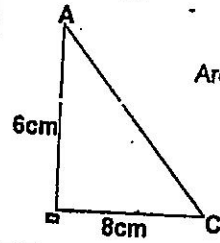
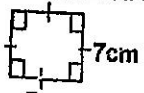
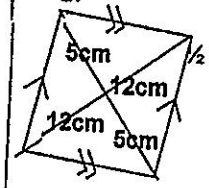
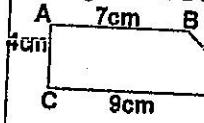
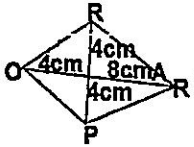
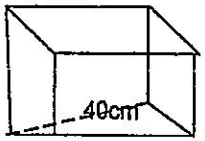
PRIMARY SEVEN MATHEMATICS SCHEME OF WORK FOR TERM III 2023

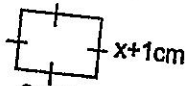
WK	PD	TOPIC	S-TOPIC	SUBJECT	LANGUAGE	CONTENT	METHODS	L/ACTIVITY	L/SKILLS	L/AIDS	REFERENCE	REMARKS
1	1	Length mass capacity	Length	The learner:- - Calculates the sides of a triangle	The learner:- - Reads different words	Calculating the sides of a right angle triangle. Find the value of b  $a^2 + b^2 = c^2$ $24^2 + b^2 = 25^2$ $576 + b^2 = 625$ $b^2 = 625 - 576$ $b^2 = 49$ $\sqrt{b^2}$ $\sqrt{49}$ $b = 7cm$	Presentation and explanation Guided discovery Discussion Use of examples Group work	-Finding the side of triangles	Critical thinking Problem solving Cooperation sharing accuracy	Text books Chalkboard Illustrations Multiplication tables	Abridged curricum P.7 Mathematics pg 45 MK primary MTCS bk 7 page 165	
	2		Perimeter	The learner: -Finds the perimeter of triangle		Finding the perimeter of a right – angle triangle  $8^2 + 6^2 = c^2$ $64 + 36 = c^2$ $100 = c^2$ $\sqrt{100} = \sqrt{c^2}$ $10cm = c$ Perimetr = 12 + 10 + 10 = 32cm.		Finding perimeter of a right angled triangle			Abridged curricullum P.7 mathematics Pg 15 MK MTCS bk 7 pg 166	
	3											
	4			The learner: Calculates the side and squares and rectangles		 Side x side = Area $S \times S = 49cm^2$ $S^2 = 49$ $\sqrt{S^2}$ $\sqrt{49}$ $S = 7$ $P = s + s + s + s$					MK primary MTCS Bk 7 pg 168 Abridged curriculum P.7 MTCS	
	5											

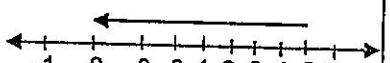
	3		Area	The learner Finds area of a triangle		Finding area of triangles Area of a triangle = ½ bh Example Find the area  Area = ½ x b x h = ½ x 8 x 6 = ½ x 8 x 6 = 1 x 4 x 6 = 24cm².		Finding area of triangles			Abridged curriculum BK 7 Pg 45 MK primary MTCS bk 7 pg 171	
	4			The learner Finds area of rectangles		Finding area of rectangles squares Find the area of a square  A = side x side = 7cm x 7cm = 49cm². Find the area of the rectangle  a = L x W = (9x5)cm² = 45cm².		Finding area of rectangles and squares			MK primary MTCS bk 7 Pg 172 Abridged curriculum bk 7 pg 45	
	5	Length mass and capacity	Area of a rhombus	The learner: Finds area of a rhombus	The learner -reads different statements	Finding area of a rhombus A =½ x diagonal 1 x diagonal 2 Find the area of the rhombus below  A = ½ x d_1 x d_2 ½ x 100cm x 24cm = 5cm x 24cm = 120cm²	Presentation and explanation Guided discovery	Finding area of a rhombus	Problem solving Critical thinking Accuracy cooperation	Chart Textbooks Chalkboard Illustration	MK primary mtcs Bk 7 pg 173 Abridged curriculum P.7 mtcs pg 45	
	6		Area of a trapizium	The learner Finds area of a trapizium		Finding area of a trapizium  a = ½ h (a+b) = ½ x 4 (7 x 9) = ½ x 4 x 16 = 2 x 16 = 32cm2	Questions and answer Use of examples	Finding area of a trapezium	Sharing		MK primary mtcs7 BK pg 174 abridged curriculum P.7 mtcs Pg 45	
	1		Area of a kite	The learner: -Finds area of a kite			Group discussion	Calculating area of a kite			Abridged curriculum P.7 mtcs pg 45	

3						QP QR is a kite. Calculate its area  $A = \frac{1}{2} \times d_1 \times d_2$ N.B We use the diagonals or we divide into 2 and use the triangles					MK primary mtcs Bk 7 pg 175	
	2		Area of a circle	The learner Finds the area of a circl		Finding area of a circle To calculate area of a circle, use Area $=\pi r^2$ $\pi = \frac{22}{7}$ or 3.14 Fid the area of a circle whose diameter is 28cm. $A = \pi r^2$ $= \frac{22}{7} \times \frac{28}{2} \times \frac{28}{2}$ $= (22 \times 7 \times 14)cm^2$ $= 616cm^2$.		Finding area of a circle			MK primary mtcs bk 7 pg 176 Abridged curriculum P.7 mtcs pg 45	
	3		Volume	The learner -Finds the volume of cubes		Find the volume of a cube of side 4cm. Volume = base area x height = (4cmcm x 4cm) x 4 cm = 16cm2 x 4cm = $64cm^3$.		Finding volume of a cube			Mk primary mtcs Bk 7 pg 177 A bridged curriculum P.7 mtcs pg 45	
	4		Volume	The learner - finds the volume of cuboids	The learner -reads prases - anwers questions	Finding volume of cuboids A lorry's fuel tank is 60cm long, 80cm wide and 40cm high. Find its volume.  Volume = base area x height V = l x w x h = 60cm x 30cm x 40cm = $1800cm^2$ x 40cm = $72000cm^3$.	Presentation and explanation Guided discovery Question and answer Group discussion	Finding volume of cuboids	Critical thinking Problem solving assertiveness Accurecy Cooperation Appreciation sharing	Charts textbooks Chalkboard illustration Multiplication tables	MK primary mtcs Bk 7 Pg 179 Abridged curriculum P.7 mathematics pg 45.	
	5			Finds the volume of different items		Finding more about volume. Example Cube packets (a) are filled in cuboid box (B) as shown.		Finding volume			MK primary mtcs Bk 7 Pg 180 Abridged	

						Calculate the volume of the cuboid box.  Volume = base area x height (LxWxh) = (4 x 5) x (2 x 5) x 3 x 5 = 20 x 10 x 15 = 200 x 15 = 3000cm^3.					curriculum P.7 mtcs pg 45	
	6		Capacity	The learner Finds volume and capacity of cubes		Finding volume and capacity of cubes A cube measures 40cm by 40cm by 40cm. (a) Find the volume of the tin (b) Find the capacity of the tin volume (a) = L x w x h = 40 x 40 x 40 = 64,000cm3 (b) Capacity in litres (1000cm3 = litres) 64000cm3 = $\frac{6400}{1000}$ = 64 litres					Abridged curriculum P.7 mtcs pg 45 MK primary mtcs Bk 7 pg 181	
4	1	Length mass capacity	Capacity	The learner Finds capacity of cuboids	The learner -reads different words and phrases	Finding capacity of cylinder Example  (a) Find capcity (b) Find capacity V = (base area) x h = πr^2 x 100cm = 22 x 70 x 70 x 100 7 = 1,540,000cm^3. (b) Capacity 1000cm3 = 1 litre 1,540,000 = $\frac{1540,000}{1000}$	Presentation and explanation Demonstration Guided discovery Group work	Finding capacity	Problem solving Accuracy Critical thinking Assertiveness	Chalkboard Illustrations Tins Textbooks	MK primary mathematics BK 7 Pg 183 Abridged curriculum P.7 mtcs Pg 46	

						$\frac{4}{3} + \frac{1}{3}$ $= \frac{3 \times 3}{4 \times 3} + \frac{1 \times 4}{3 \times 4}$ $= \frac{9}{12} + \frac{4}{12} = \frac{13}{12}$ $= \frac{13}{12} = 1\frac{1}{12}$						
5	1		Equations	The learner -Solves simple equations		**Solving simple equations** Examples Solve x + 5 = 13 Subtract 5 from each side X + 5 – 5 = 13 – 5 X = 8		Solving simple equation			Mk primary mtcs bk 7 pg 190 Abridged curriculum p.7 mtcs pg 47	
	2			Solves equations involving removing brackets		**Solving equations involving removing brackets.** Examples Solve: 3 m + 2 = 21 3m + 6 = 21 Subtract 6 from both side 3m + 6 – 6 = 21 – 6 3m = 15 Divide each side by 3 $\frac{3m}{3} = \frac{15}{3}$ M = 5		Solving equation involvin g removin g brackets			A bridged curriculum p.7 mtcs p.g 47 mk primary mtcs bk 7 pg 191	
	3	Algebra	Equations	The lamer:- - Forms and solve equations	The learner:- - reads different equations	Forming and solving equations Examples Kalema bought 2kg of sugar at Sh. 3p per kg andd 1 kg of salt at sh. P + 200. Find if Kalema paid Sh. 3700. 2kg of sugar = 2 x 3p = 6p 1kg of salt = Sh. P + 200 P + 200 + 6p = 3700 7p + 200 – 200 = 3700 – 200 $\frac{7p}{7} = \frac{3800}{7}$ P = 500	Presentatio n and explanation Guided discovery Use of examples	Forming and solving equation	Critical thinking .Problem solving	C/board Illustrati ons Textboo k	MK primary mtcs bk 7 pg 192 Abridged curriculum p.7 mtcs pg 47	
	4			The learner: Solves different equations		Forming and solving equations Example I think of a number, add 7 to it and double the result. The answer is 40. What is the number? Let the number be x X + 7 (Add 7)		Forming and solving equation			MK primary mtcs bk 7 pg 193 Abridged curriculum p.7 mtcs Pg 47	

						2(x + 7) double the result. 2(x+7) = 40 2x + 14 = 40 2x + 14 – 14 = 40 – 14 $\frac{2x}{2} = \frac{26}{2}$ X = 13						
				The learner Solves equations		Using LCD to solve fractional equations Example Solve: $\frac{2p}{3} - p = 5$ $\frac{2p}{3} - \frac{p}{1} = \frac{5}{1}$ Multiply each term by 3 $\frac{2p}{3} \times 3 - \frac{p}{1} \times 3 = \frac{5}{1} \times 3$ 2p – 3p = 15 -p = 15 $\frac{-p}{-1} = \frac{15}{-1}$ P = -15		Solving fractional equation				Abridged curriculum p.7 mtcs Pg 47 MK primary mtcs bk 7 pg 194
	6	Algebra	Like terms and unlike terms	The learner -Identifies like and unlike terms	The learner Reads different phrases	**Identifying like terms and unlike terms** Examples P =32cm. find x  2x+3+x+1+2x+3+x+1 = 32cm 6x+8-8 = 32 – 8 6x = 24 $\frac{6x}{6} = \frac{2y}{6}$ X = 4	Presentation and explanation Guided discovery Use of examples	Identifying like terms and unlike terms	Critical thinking Problem solving Accuracy creativity	Chalkboard Illustrations	Mk primary mtcs Bk 7 Pg 195 Abridged curriculum P.7 mtcs pg 47	
1	1		Removing brackets	The learner -Solves numbers by removing brackets		Solve = 2(3x-1) – 4(x – 1) = 4 6x – 2 – 4x + 4 = 4 6x – 4x + 4x – 2 = 4 2x + 2 = 4 2x + 2 – 2 = 4 – 2 2x – 2 $\frac{2x}{2} = \frac{2}{2}$ X = 1		Solving number			MK primary mtcs Bk 7 pg 196 Abridged curriculum P.7 mtcs pg 47	
	2			The learner Solves		Solving equations involving Squares	Solving equations				MK primary mtcs bk 7		

				equations		Example Solve: ½ $p^2 = 8$ Multiply each term by 2 $P^2 \times 2 = 8 \times 2$ 2 P2 = 16 Find square root $\sqrt{P \times P} = \sqrt{4 \times 4}$ P = 4					pg 197 Abridged curriculum P.7 mtcs Pg 47	
	3			The learner solves equation		**Solving equations with decimals Examples** Solve; 0.4p + 0.5 = 2.1 4p + 5 = 21 10 10 10 Multiply by 10 $10 \times \frac{4p}{10} + \frac{5}{10} \times 10 = \frac{21}{10} \times 10$ 4p + 5 = 21 4p + 5 – 5 = 21 – 5 4p = 16 $\frac{4p}{4} = \frac{16}{4}$ P = 4		Solving equation			MK primary mtcs bk 7 pg 198 Abridged curriculum p.7 mtcs pg 47	
	4.	Algebra	Inequalities and solution sets	The learner Solves solution sets	The learners Reads different phrases	Example Find the solution set for x < 5 when x is a whole number  The solution set for x = {4, 3, 2, 1, 0}	Presentation and explanation Guided discovery	Finding solution sets	Critical thinking Problem solving Accuracy	c/board illustrations textbook	MK primary mtcs bk 7 pg 199 to 200. Abridged curriculum p.7 mtcs pg 47	
	6					**Solving inequalities and finding solution sets.** Example Solve 8> 2x >2 8>2x>2 $\frac{8}{2} > \frac{2x}{2} > \frac{2}{2}$ = 4 > x > 1 Solution set = {3, 2}	Group discussion Use of examples	Solving inqualities	Assertiveness		MK Primary mtcs bk 7 pg 20. Abridged curriculum P.7 mtcs Pg 47	
7	1		Algebra in real life situations	The learner Forms and solves		Forming and solving simple equations Examples		Forming and solving			MK primary mtcs bk 7 pg 20	

				simple equations		John is 12 years older than Mary. If their total age is 78 years. How old is Mary? Let Mary's age be x (Mary) + (John0 = 78 X + x + 12 = 78 2x + 12 – 12 = 78 – 12 $\frac{2x}{2} = \frac{66}{2}$ X = 33. Mary is 33 years old.		equation				Abridged curriculum P.7 mtcs pg 47.	
				The learner Forms and solves equations		**Forming and solving more.** A mother is 18 years older than her son. In 10 years time, she will be twice as old as her son. How old is the son? now → mother → son x+19 | x mother son in 10 years x+18 + 10 | x + 10 compare mother = 2sm x + 28 = 2 (x + 10) x + 28 – 28 = 2x + 20 – 28 x + 28 – 28 = 2x + 20 – 28 x = 2x – 8 x – 2x = 2x – 2x – 8 $\frac{x}{1} = \frac{8}{1}$ X = 8 The son is 8 years old		Solving equation				Abridged curriculum P.7 mtcs Pg 47 MK primary mtcs BK 7 pg 203.	