P.4 MATHEMATICAL SCHEME OF WORK FOR TERM TWO

THE LEARNER DEMONSTRATES THE CONCEPTS OF FRACTIONS AND THEIR RELATIONSHIP IN REAL LIFE SITUATIONS

WK	PD	THEME	TOPIC	SUB TOPIC	COMPETENCES		CONTENT	INDICATORS OF LIFE SKILLS AND VALUES	METHOD / TECHNIQUES	ACTIVITY	RESOURCE	REM
					LAGUAGE	SUBJECT						
1	1	NUMERACY	FRACTIONS	TYPES OF FRACTION	Names types of fractions Reads types of fractions	Gives examples of each type of fraction Writes types of fractions.	TYPES OF FRACTIONS Unitary fractions. Have their numerators as 1 e.g ½, $^{1}/_{5}$, $^{1}/_{11}$, __ __ __ -Proper fractions: have the numerators less than the denominators e.g $^{2}/_{3}$, $^{4}/_{9}$, $^{6}/_{13}$ _ __ __ Improper fractions Have the numerators greater than the denominators e.g 5, 6, 11 _ __ __ 3 5 2	**effective communication** audibility fluency confidence	Explanation Think, pair and share	Naming fractions Writing fractions Reading fractions giving examples of each type of fractions Writing notes about fractions	Mk Mtc Book 4 syllabus bk 4 page 10 Understanding Maths book 4 page 10	
	2			Improper fractions	Reads statements Pronounce the key words	Changes improper fractions to mixed numbers Divides the numerator by denominator	-Changing improper fractions to mixed numbers Example Change $^{5}/_{2}$ to a mixed fraction -Divide the numerator by the denominator 2W $^{5}/_{2}$= 2D 5	effective communication problem solving confidence	Explanation reading statements Writing improper fractions as mixed fraction	Mk Maths Book 4 Page 92	Mk Mtc Book 4 page 92 syllabus bk 4 page 10	

							2x2 = - 4 1N = 2½		Think, pair and share		Understanding Maths book 4 page 10	
	3			Mixed fractions	Expresses mixed numbers as improper fractions		Changing mixed numbers to improper fractions Use: (D X W) + N / D Example Express 1½ = D X W + N / D 2 X 1 + 1 / 2 = 2+1 / 2 = 3 / 2	logical thinking accuracy innovativeness fluency taking decision	Question and answer Think, pair and share	Expressing mixed fractions as improper fractions	Mk Math book 91 Understanding Maths book 4 page 59-60 Syllabus bk 4 page 10	
	4			Equivalent fractions	Writes equivalent fractions Describes and names equivalent fractions	Finds equivalent fractions of given fractions multiplies both numerator and denominator by same digit	Equivalent fractions Find the equivalent fraction for 1 = 1 x 2 = 2 / 3 3 x 2 = 6 1 = 1 x 3 = 3 / 3 3 x 3 = 9 1 = 2 = 3 / 3 6 = 9	effective communication problem solving fluency taking decision	Explanation Discussion Market stall	Multiplying Finding equivalent fractions	Mk math book 4 page 80 Chalk board illustration Syllabus bk 4 page 10	
	5			Filling in the missing number	Identifies the missing part	Finds the factor to find the missing part Fills in the box correctly	Finding missing parts of fractions Example Find the missing part in: i) 1 = 3□ / 2 6 6 ÷ 2 = 3 1 x 3 = 3 / 2 x 3 6 2. 3 = 12	logical thinking accuracy making choice evaluating facts	Guided discovery Market stall	Finding missing parts	Essential book 5 page 43 Mk Maths Book 4 page 82 Chalk board illustration	

							5 20 12 ÷ 3 = 4 3 x 4 = 12 5 x 4 20	think, pair and share				
	6			Reducing fractions	Carries out division to get the lowest fraction Writes the fraction to the lowest term Quotient Dividend Divisor	Reduces the given fractions to lowest terms Finds the highest common factor	Reducing fractions Lowest terms: writing a fraction in the lowest terms is when a fraction has the and denominator a common factor as 1. Example Reduce 4 to the lowest terms 12 4 = 4 ÷ 4 HCF =4 12 12÷4 = 1 3	**effective communication** problem solving confidence	explanation discussion think, pair and share	reducing fractions in the lowest terms	Mk Mats book 4 page 84 Chalk board illustration Syllabus bk 4 page 10	
	7			Comparing fractions	Names symbols used in comparison of fraction Differentiates symbols used to compare fraction		Comparing fractions symbols used to compare fractions Greater than < less than = equal Example Which is greater 5 or 3 8 4 LCM 2 8 4 2 | 4 2 = 2X 2 X 2 2 | 2 1 = 4 X 2 1 | 1 = =8 5 X 8 = 5 3 X 8 = 3 X 2 8 4 = 6 3>5 4 8	critical thinking accuracy logical thinking	Problem solving Question and answer Market stall	Naming symbols used in comparing fractions Applying symbols correctly	Understanding Mathematucs book 4 page 66-67 Mk Maths Book4 page 86 Chalk board illustration	
2	1			Addition of fractions with the same	Reads fractions Writes fraction	Adds fractions with the same denominators Reduces fractions	Addition of fractions with the same denominators Example Simplify 1 + 1 = 1 + 1 3 3 3	effective communication	Question and answer Market stall	Adding fractions with the same denominators	Essential book4 page 44 Mk maths book 4 page 86	

				denominators			= 2/3	problem solving			Chalk board illustration	
	2			Addition of fraction with different denominators	Reads statements Writes statements	Find the LCM of different denominators Adds fractions with different denominators	Addition of fraction with different denominators. Example 1. Work 1/2 + 1/3 1 x 3 + 1 x 2 / 2 x 3 = 6 3 + 2 / 6 = 5/6	accuracy critical thinking making choice	Question and answer Think, pair and share	Adding fractions with the same denominators	Essential book 5 page 44 Mk maths book 4 page 86 Chalk board illustration	
	3			Addition of mixed numbers		Identifies whole numbers from fractions Adds mixed fractions with the same denominators	Addition of mixed fractions with the same denominators Example Simplify $1^1/_3 + 4^1/_3$ Re arrange $(1\ ^1/_3) + (4 + \ ^1/_3)$ $1 + \ ^1/3 + 4 + \ ^1/_3$ $1+4+^1/_3+^1/_3$ 5+1+1/3 5 + 2/3 $5\ ^2/_3$	effective communication problem solving taking decision	Explanation Discussion	Adding mixed fractions with the same denominators	Mk Math book 4 page 93 Chalk board illustration	
	4				Read fractions write fractions	Changes mixed numbers to improper fractions Finds lowest multiple Adds mixed numbers with different denominators	Addition of mixed numbers with different denominators Example Add 2 ¼ + 1 7/8 ¼ + 1 7/8 4 x 2 +1 / 4 + 8 x 1 + 7 / 8 9x2 / 4 + 15 x1 / 8 9 x 2 + 15 x 1 / 8 18 + 15 / 8 LCM	logical thinking accuracy	Question and answer	Adding mixed fractions with different denominators	Understanding math book 4 page 70 Chalk board illustration	

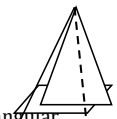
							33/8 = 4 1/8 2 4 8 2 2 4 2 1 2 1 1					
	5			ADDITION OF FRACTIONS	Reads and interprets statements	Adds fractions in word problems	Addition of numbers in word problem Example 1.John dag $^1/_6$ of the garden and Mary dag $^4/_6$the garden. What part of the garden was dug? 1/6 + 4/6 = 1+4/6 = 5/6 1 + 4/6 = 5/6	effective communication problem solving making choice taking decision	Explanation Discussion Think pair and share	Reading statements Adding fractions	Mk Maths Book 4 page 88 Chalk board illustration	
	6			Subtraction of fraction	Reads fractions orders fraction with same denominator	Subtracts fraction with the same denominators Reduces fractions	Subtract ion of fraction with the same demonitors Example Work out 3/4 – 1/4 = 3 – 1/4 = 2/4 4/5 – 1/5 = 4 – 1/5 = 3/5	effective communication problem solving	Explanation Discussion Think pair and share	Reading statements Adding fractions	Mk Mathsbook 4 page 88 Chalk board illustration	
	7			Subtraction of fraction	Subtract fractions with the same denominators		Subtraction of fractions with the same denominators Example Work out 3/4 – 1/4 = 3 – 1/4 = 2/4	logical thinking accuracy audibility	Question and answer	Subtract fractions with the same denominators	Essential book 5 page 42 Mk Math Book 4 page 89 Chalk board illustration	

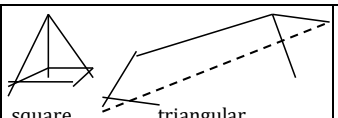
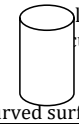
3	1				Reads and solves problems	Finds the lowest common multiples Applies the ;lowest common multiple Work out subtraction of fractions with different Denominators	Subtraction of fractions with different denominators Example Work out $\frac{3}{4} - \frac{2}{3}$ $\frac{(3x\ 3)}{(4\ x3)} - \frac{(2\ x\ 4)}{(3x4)}$ $\frac{9}{12} - \frac{8}{12}$ $\frac{9 - 8}{12}$ $\frac{1}{12}$	effective communicatio n problem solving taking decision	Explanation Discussion	Finding lowest common multiple Subtracting fractions with different denominators	Mk Mathemati cs Bk 4 Page 94 - 95 Chalk board illustration	
	2				Reads and writes the statements	Subtracts mixed numbers with the same denominators correctly	Subtraction of mixed numbers with the same denominators Example Subtract $4\ 3/5 - 2\ 1/5$ Rearrange $= (4+ 3/5) +- (2 + 1/5)$ $=(4 -2) + ({}^{3}/_{5} - {}^{1}/_{5})$ $2 + {}^{2}/_{5}$ $2^{2}/_{5}$	critical thinking accuracy logical reasoning	Problem solving Question and answer	Subtracting fractions	Mk math book4 page 93 Chalk board illustration	
	3				Reads and writes fractions	Changes mixed fractions to improper numbers Finds the lowest common multiple Subtracts mixed numbers	Subtraction of mixed fractions with different denominators $4{}^{5}/_{6} - 1\ {}^{1}/_{3}$ $\frac{6 \times 4 + 5}{6} - \frac{3 \times 1 + 1}{3}$ $\frac{29 \times 1}{6} - \frac{4 \times 2}{3}$ $\frac{29 \times 1 - 4 \times 2}{6}$ $\frac{29 - 8}{6}$ $\frac{21}{6}$ $= 3½$	effective communicatio n -fluency confidence	Explanation	Subtracting mixed fractions into different denominators	Understan ding Math book 4 page 70 Chalk board illustration	

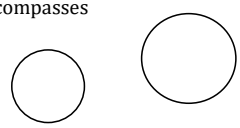
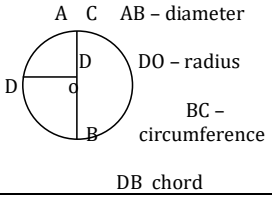
						with different denominators						
	4				Reads and interprets the statements Writes fractions	Subtracts fractions in word problems	Subtraction of fractions in word problem Example Andrew had $^{7}/_{9}$ of a cake and ate $^{5}/_{9}$ of it in the afternoon? What fraction remained? $\frac{7}{9} - \frac{5}{9}$ $= \frac{7-5}{9}$ $\frac{2}{9}$	logical thinking accuracy confidence	Question and answer	Reading and writing statements Subtracting fractions	Mk maths book4 page 89 Chalk board illustration	
	5			Multiplication of fractions	Identifies numerators and denominators	Multiplies fractions Reduces the answers where necessary	Multiplication of fractions Example Simplify $\frac{1}{5} \times \frac{2}{3} = \frac{n \times n}{d \times d}$ $\frac{1 \times 2}{5 \times 3}$ $\frac{2}{15}$	effective communication problem solving acceptance decision making	Explanation Discussion	Multiplying fractions	Mk Maths book 4 page 95-96 Chalk board illustration	
	6				Interprets "of" in mathematics Cancels properly	Applies "of" in fractions Reduces fractions	Fraction of a group Examples What is ½ of 6 ½ x 6 1x3 =3 2. Find $\frac{2}{3}$ of 12 $\frac{2}{3}$ x 12 2 x 4 $=\frac{8}{}$	logical thinking accuracy giving instructions	Guided discovery Question and answer Think, pair and share	Multiplying group fraction	Mk Math book 4 page 96 Chalk board illustration	
	7			Application of fractions	Reads and interprets statements	Finds the unknown fractions	Example There are 14 cups in a cupboard. 2/7 of them are dirty and the rest are clean.	effective communication	Explanation Discussion	Reading and writing statements	Mk Math book 5 page 137	

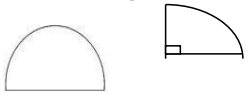
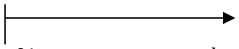
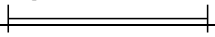
					Spells words	Applies fractions in word problems	a) Find the fraction for clean cups $1 - {}^{2}/_{7}$ $=\frac{7}{7} - \frac{2}{7}$ $\frac{7-2}{7}$ $\frac{5}{7}$ b) How many cups are dirty? $^{2}/_{7}$ of 14 $^{2}/_{7}$ x 14 2 x 2 = 4 cups c) How many cups are clean $\frac{5}{7}$ of 14 $\frac{5}{7}$ x 14 cups 5x2 = 10 cups	problem solving acceptance making questions		Working out fractions in word problems	Essential book 5 page 46-47 Chalk board illustration	
4	1			Decimals	Describes a decimal fraction. Reads decimal	Expresses common fraction as decimals Divides numerator by denominator	A decimal fraction is a fraction expressed with a decimal point Expressing fractions as decimals Example Express as decimals. 1. $\frac{3}{10}$ = 0.3 10 | 3 0x10 = -0 30 3x10 = - 30 = 0.3 $\frac{24}{100}$ = 0.24 100 | 24 0 x 100 = 00 240 2x 100 = - 200 400	logical thinking decision making asking questions	Explanation Discussion	Dividing common fractions to get decimal fractions	Mk Maths Book 4 page 100 Chalk board illustration	

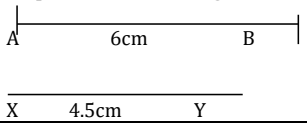
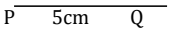
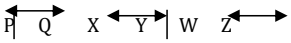
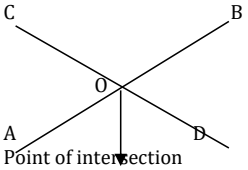
							4 x 100 = 400					
	2				Reads the fraction Writes fraction	Expresses common fractions whose denominators is not a multiple of ten as decimals	Example Change ½ to decimal 0.5 ½ = 2 | 1 0x 2 = 0 1 0 2x5 = 1 0 = 0.5 Addition of decimals Example add: 1) 0.2 + 0. 5 P.O.W =0. 7 0.5 + 0.2 0.7 2) 3. 6 + 1.2 P.O.W = 4. 8 3. 6 + 1. 2 4.8 3. 4.8 + 3.6 s w 4.8 + 3.6 8.4	accuracy creative thinking logical reasoning initiative new ideas	Question and answer	Expressing common fraction as decimals	Mk Maths Book 4 Page 100 Chalk board illustration	
	3				Reads and interprets statements Identifies place values	Adds decimals correctly Arranges whole numbers and decimals	Word problems in addition of decimals Example 1. I ate 0.2 of cake in the morning and 0.7 of it in the evening. What fraction did I eat altogether? 0.2 + 0.7 P.O.W = 0.9 0.2 + 0.7 0.9	accuracy confidence	Question and answer	Reading and writing statements Adding decimals in word problems	Mk Math book 4 page 104 – 105	
	4			Subtraction of	Reads fractions	Identifies correct place values	Subtraction of decimals Example	effective communication	Explanation Guided discussion	Subtracting decimals	Mk Math book 4 page 110	

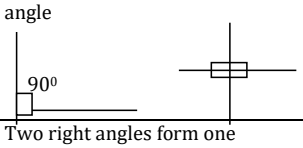
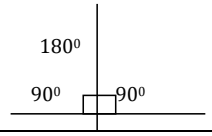
				decimals	Writes fractions	subtracts decimals with or without regrouping	Work out P.O.W 4.5 – 2.3 4.5 = 2.2 -2.3 2.2 2. 9.6 – 3.7 9. 6 = 5.9 - 3.7 5.9				Understanding Mathematics Book 4 page 75 Chalk board illustration	
e.l.o the learner demonstrates knowledge of 2 dimensional figures and uses construction instruments in appropriate situations												
	5	GEOMETRY		NAMING SHAPES	Names solid shapes Reads names of solid figures Writes names of solid figures	Draws the given shapes States properties of given shapes. Names solid shapes Draws solid shapes	**Planes shapes**: are flat surface shapes **Naming shape**: square, triangles, kite, rhombus, oval trapezium, parallelogram. **Properties of shapes** **Square:** equal sides (4 sided) All angles area equal (right angles **Rectangle** two opposite angles equal -All angles equal **Rhombus** (4 sides) -All angles add up to 360^0 **Opposite angles equal triangles** -All angles add up to 360^0 -Has three angles	logical thinking effective communication accuracy fluency audibility	Discussion Observation	Drawing plain diagrams Squares -rectangles -rhombus	Understanding MathsPri 4 page 113	
	6			Solid shapes	Names solid shapes Defines solid shapes	Draws solid shapes	**SOLID SHAPES** Solid shapes are shapes with three dimensions i.e x, y, 3 Names: cone, cuboid, cylinder, cone, pyramid and prisms. Drawings  Triangular pyramid  rectangular pyramid	problem solving logical thinking accuracy confidence audibility	Drawing and naming solid shapes Drawing and naming parts of solid figures	Real objects Chalk board illustration	Mk Mathsbk 4 page 128	

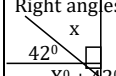
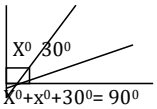
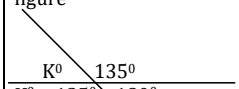
							 square pyramid triangular prism					
	7			Parts of the solid	Names parts of a solid shape Reads parts of solid figures	Identifies the number of faces edges and vertices of given shapes Counts the number of faces, edges and vertices of the given shape	Cube  vertex (corner) 8 face -6 edge -12 Triangular  plane surface vertex edge triangular face cylinder  lane surface urved surface edge curved surface	effective communication accuracy logical thinking accuracy	Drawing circles Measuring radii	A chart showing solid figures Round objects Pair of compasses	Mk Pri Math Page 135	
5	1			Construction of plane shapes	Naming instruments and figures	Identifies the figures rectangle triangle square	Names of instruments Protractor Pair of compasses Divider Ruler Set squares	logical thinking	Explanation	Measuring		
	2					Constructing 2 dimension figures Steps taken -measures lines using	Construction	effective communication accuracy	Discussion Explanation	Constructing	c/b illustration	

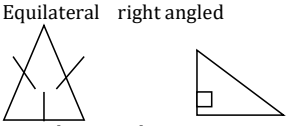
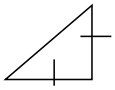
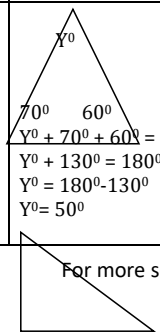
						rulers or divider Join the lines to form figures like rectangle square etc						
	3					Measuring and naming right angles	Measuring right angles	logical thinking accuracy	Explanation	Naming Drawing	Real objects	
	4			CIRCLES	Defines a circle Defines parts of the circle	Draws circles	**A circle** is a simple closed figure made up of curves Drawing circles using objects Drawing circles using a pair of compasses 	effective communication logical thinking accuracy audibility	Discussion	Drawing circles showing parts of the circle	A chart showing parts of the circle	
	5			Drawing parts of the circle	Defines parts of the circle Reads parts of the circle Pronounces the key words		**Parts of the circle** **Diameter**: line running from edge through the center to another point. **Radius:** starts from the centre to the circumference around the circle **Circumference**: Is the distance around the circle.  AB – diameter DO – radius BC – circumference DB chord	effective communication logical thinking accuracy giving instructions asking question	Discussion	Drawing circles showing parts of the circle	A chart showing parts of the circle	

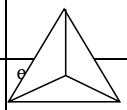
	6			Naming parts of the circle	Names parts of a circle Relates parts of a circle		Naming parts of a circle Semi circle quadrant  Minor segment sector	effective communication accuracy	Finding length of diameter	Chalk board illustration	Mk Pri Math Bk 4 page 139	
	7			Relating diameter to radius	Read the words Write the words	Identifies diameter Relates diameter to radius Uses formula to find radius	Diameter is twice radius Twice means two times D – 2r Finding the diameter of a circle whose radius is 2cm D = 2r D = 2 x 5cm D = 10cm RADIUS 2cm 6cm __ 9cm 16cm Diameter 4cm __ 10cm ____ Complete the table	logical thinking initiating new ideas	Discussion Demonstration	Chalk board illustration	Mk Pri Math Bk 4 page 139	
6	1			Finding the radius of a given diameter	Reads and writes	Relates radius to diameter Finds the length of the radius	Complete the table Radius is half the diameter half the diameter $R = D/2$ The diameter of a circle is 6cm. Find its radius $R = D/2$ $R = 6/2$ R = 3 RADIUS 4cm ___ 12cm 18cm 30cm Diameter 8cm 10cm ___ ___ ___	logical thinking taking decisions	Discussion Demonstration	Chalk board illustration	Mk Pri Math Bk 4 page 139	
	2			Lines	Identifies types of lines Draws these lines		Line: distance between two places 1. Line has no end points 2. Ray: has one end point.  3. Line segment: two end points 	problem solving taking decision making choice	Illustration Observation	Draws and measures lines Text books Chalk board illustration	MK MTC BK 4 page 142	

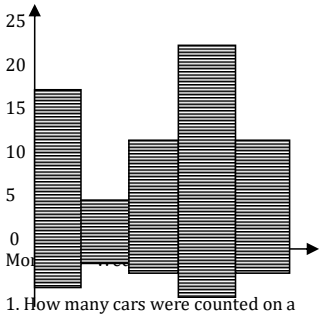
	3			Measuring lines	Writes the measurements	Identifies lines drawn Measures line segments Measures lines Segments drawn	**Measuring lines** Use a ruler to measure the line segment drawn below: **Step 1:** place a ruler at the drawn line segment **Step 2** follow the ruler up to the end of the line segment **Step 3:** Take the reading.  	problem solving making choice	Illustration Observation	Draws and measures lines Text books Chalk board illustration	MK MTC BK 4 page 142	
	4			Drawing and naming lines	Reads, draws and writes	Draws line segments Names line segments drawn	**Drawing line segments** Use a ruler from zero move up to the required length. Put a point then join the two points.  step 1 Step 2 Name according to the point 	problem solving	Forming angles	chalk board illustration	Mk Mathsbk page 142	
	5						**DEFINITION OF AN ANGLES** A measure of turning between two lines that start from the same point. FORMATION OF ANGLES  Point of intersection	effective communication accuracy audibility	Demonstration	A chart showing formed angles	MK math bk 4 page 143	
	6			Naming angles		Names angles using letters	**Naming angles formed** Points of intersection is O. Angles formed are AOD or DOA	effective communication	Demonstration	A chart showing formed angles	MK math bk 4 page 143	

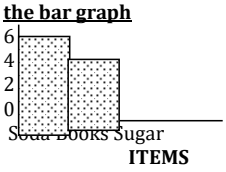
							AOC or COA BOD or DOB	accuracy confidence				
	7			TYPES OF ANGLES		Identifies the types of angles Names given angles	**Types of angles** Right angles (90^0) Complementary angles add up to 90^0 @ angle is 90^0 Two right angles form one straight angle  	logical thinking accuracy confidence	Demonstration Explanation	Draw a $90^0$and 180^0 Chalk board illustration	Mk Math Bk 4 page 144	
7	1			Types of angles		Names given angles	Two right angles form one straightAngle. (suplementary angle)  	logical thinking accuracy confidence	Demonstration Explanation	Draw a $90^0$and 180^0 Chalk board illustration	Mk Math Bk 4 page 144	
	2			Measuring given angles	Writes angles	Measuring given angles using a protractor Identifies the scale on the protractor to be used	**Measuring angles** We use a proctractor to measure angles scales: inner and outer measure the following angles on page 145	logical thinking accuracy confidence				
	3			Complementary angles	Define complementary angles	Finds complementary angles Finds complements of angles	Findinf complents of angles Example Finds the complement of 60^0 Let the complement be k $K + 60^0 = 90^0$ $K + 60^0 - 60^0 = 90^0 - 60^0$ $K = 30^0$ P.O.W 90 -60 30	effective communication problem solving making choice	Measuring angles	Text books	Mk Math Bk 4 page 145	

	4			Finding missing angle	Writes missing angles	Finds missing angles in a right angled figure	**Finding missing angles** Right angles add up to 90^0  $X^0 + 42^0 = 90^0$ $X^0 + 42^0 - 42^0 = 90^0 - 42^0$ $X = 48^0$  $X^0 + x^0 + 30^0 = 90^0$ $2x^0 + 30^0 = 90^0$ $2x = 90^0 - 30^0$ $\frac{2x}{2} = \frac{60^0}{2} \quad \frac{30^0}{2}$ $x = 30$	explanation discussion making questions asking questions	Measuring angles	Textbooks	Mk Math book 4 page 145	
	5			Finding supplementary angles	Writes angles	Defines supplementary angles Finds supplementary angles Finds missing angles on a straight line Forming equations	**Finding supplement of angles** Find the supplement of 68^0 $g^0 + 68^0 = 180^0$ $g^0 + 68^0 - 68^0 = 180^0 - 68^0$ $g^0 = 112^0$	effective communication making questions	Measuring angles	Textbooks	Mk Math book 4 page 145	
	6			Finding angles of a straight line Forming equation	Writes angles	Finds missing angles on a straight liner Forming equations	**FINDING MISSING ANGLES ON A STRAIGHT LINE** Finding the missing angle in the figure  $K^0 + 135^0 = 180^0$ $K^0 + 135^0 - 135^0 = 180^0 - 135^0$ $K^0 = 45^0$	effective communication logical thinking fluency audibility	Finding missing angles on a straight line	Finding missing angles	MK Mathsbk 5 page 199	

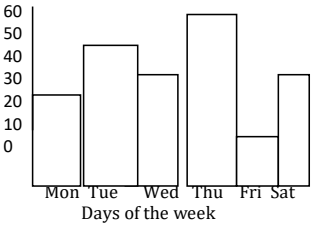
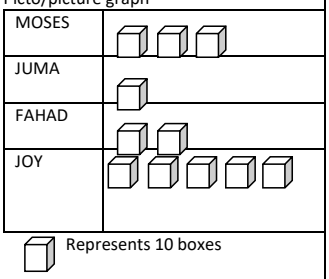
	7			Polygons	Writes and names polygons	Defines polygons Draws polygons Identifies sides of different polygons	A polygon is a simple closed figure made up of more than two line segments Names No of sides Triangle 3 Quadrilaterals 4 Pentagon 5 Hexagon 6 Septagon 7 Octagon 8 Nonagon 9 Decagon 10	effective communication logical thinking	Finding missing angles on a straight line	Finding missing angles	MK Mathsbk 5 page 199	
8	1			Types of triangles	Names types of triangles and their properties Differentiates types of triangles \ Draws different	Types of triangle	Types of triangle 1. equilateral(all sides are equal) 2. isosceles (2 sides/ angles equal) 3 obtuse angles (one < $90^{0)}$ Equilateral right angled  Isosceles triangle 	logical thinking problem solving evaluating facts	Discussion Demonstration	Finding missing angles	MK Mathsbk 5 page 199	
	2			Finding m issuing angles of a triangle	Finds missing angle in any triangle Identifies triangles with 90^0 (right angle)		 Y^0 70^0 60^0 $Y^0 + 70^0 + 60^0 = 180^0$ $Y^0 + 130^0 = 180^0$ $Y^0 = 180^0 - 130^0$ $Y^0 = 50^0$	demonstration question and answer making questions	Finding missing angles in a triangle	Chalk board illustration	Mk Math Bk 5 page 201	

							30^0 □ m^0 $M^0 + 30^0 + 90^0 = 180^0$ $M^0 + 120^0 = 180^0 - 130^0$ $M^0 = 60^0$					
	3			Four sided polygon		Defines quadrilaterals Names types of quadrilaterals	Quadrilaterals These figures are four side/ polygons Examples of quadrilaterals Square – equal sides and the angles are equal -rectangle -rhombus Trapezium Kite parallelogram	problem solving making choice fluency audibility	Drawing and naming polygons			
	4	GEOMETRY		Names of 3 dimensional figures			Naming figures a cube a cuboid A cylinder Drawing solid figures  A cuboid  A cube	logical thinking Accuracy	explanation	Drawing	Real objects	
	5			Drawing shapes	Writes names of polygons	Other figures Prisms, triangular, rectangle. Pyramids		effective communication	Discovery	Drawing	Chalk board illustration	
	6			Naming parts of a solid figures	Writes parts of solid figures	Parts of solid figures Vertices Faces Edges Angles	e faces vertices	effective communication fluency audibility	Discovery	Drawing and naming Counting faces, edges and vertices	Chalk board illustration understanding page 117	
	7				Measuring solid figures	Measuring three dimensional figures		logical thinking making choice	Discovery Explanation	Drawing solid shapes Cube	Understanding maths page 118	

						Steps taken Measure the lines and angles Join to form solid shapes		taking decision		Cuboid	Syllabus bk 4 page 13	
e.l.o: the learner represents and interprets simple mathematics data in various forms												
9	1	INTERPRETATION OF GRAPHS AND DATA	GRAPHS AND INTERPRETATION OF data	TALLIES	Reads and interprets the tally graph Answers word problems	Identifies and recognizes tally marks	**Tallies** One two three four five six **The graph shows no of cars recorded in a week**  1. How many cars were counted on a Tuesday? 2. Find the total number of cars counted on Thursday and a Tuesday? Thurs -20 cars Tues - +5 cars 25 cars	logical thinking problem solving effective communication acceptance making questions giving instructions	Observation Explanation Discussion	Drawing tally marks Drawing tally tables	Mk mathematics book 4 page 118 and 119 Syllabus bk 4 page 13	

	2						A lorry carries items as shown in the table below. **Show the same information on the bar graph**  	problem solving effective communication accuracy asking questions	Observation Discussion Accuracy Asking questions	Reading and interpretation Drawing graphs	Mk maths book 4 page 120	

Item	Soda	books	sugar
No item	6	4	0

	3			Interpreting bar graphs	Writes questions about the graph	Draws graph Shows information on the graph	**Study the graph and answer the questions**  1. How many litres were collected on Monday? Ans: 20 litres How much milk was collected on Tuesday, Thursday and Friday Tue-40+Thur50+Sat30+=120	problem solving effective communication fluency audibility	Observation Discussion Think, pair and share	Reading and interpretation Drawing graphs	Mk maths book 4 page 120 Syllabus bk 4 page 14	
	4						Picto/picture graph  Represents 10 boxes 1. How many apples did Juma sell? 2. How many boxes did Joy and Moses sell? (5x10)+(3x10) 50 + 30 = 80 boxes	effective communication confidence making questions asking questions	Reading and interpreting information Think pair and share	A chart showing pictographs	Mk math Bk 4 Syllabus bk 4 page 14	

	5			Interpret pictograph using a given scale		Reads information Interprets information Draws pictograph Interpreting pictograph using the given scale	Making pictographs using scale. e.g make a pictograph for the following information John has 12 triangles Moureen has 15 triangles Sarah has 18 triangles scale △ rep. 3triangles draw a picto graph	logical thinking effective communication fluency audibility confidence	Reading and interpreting questions	Real objects Chalk board illustration	Understanding Maths Primary 3 page 113	