

**PRIMARY SIX MATHEMATICS SCHEME OF WORK—TERM III**

W K	P D	THEM E	TOPIC	SUBTOPIC	COMPETENCES		CONTENT	METHOD	LIFE SKILLS	ACTIVITIES	L/T AIDS	REF	REM
					SUBJECT	LANGUAGE							
1	1 & 2 & 3	M E A S U R E M E N T	<b>LENGTH, MASS AND CAPACIT Y</b>	<b>Conversion of metric units</b>	The learner: 1. Identifies the different metric units 2. Changes from one unit to another.  3. Changes from square unit to another.	The learner: reads and uses the words such as metric, conversion, units	Example 1. Change 5dm to centimeters. 2. Convert 8.5m to millimeters. 3. Express 25Km to metres. 4. Convert 4m <sup>2</sup> to cm <sup>2</sup>	Brainstorming  Guided discovery  Problemsolvin g	Appreciati on of oneself and others,  Problem solving  and assertiven ess	Drawing the table showing the different metric units.  Doing the class exercise.	A chart showing the conversio n of the metric units	Underst anding mtcs bk 6 page  Mk mtcs bk 6 page 313  Fountai n mtcs bk 6 pg	
	4 & 5			<b>Finding area when given the perimeter</b>	The learner 1. Calculates the perimeter of the rectangle and square. 2. Finds the missing side. 3. Calculate the area when given the perimeter.	The learner explains the meaning of words such as length, width, perimeter and area.	<b>Example</b> 1. The area of a square is 81cm. Calculate its perimeter.  2. The area of a rectangle is 45dm and the width is 5dm. Find the perimeter of the same rectangle.	Guided discovery  Class discussion  Brainstorming	Expressing one's point of view,  Effective decision making and respecting others.	Answering the oral questions  Attempting the given evaluation exercise.	Chalkboa rd illustratio n	Function al mtcs bk 6 page  Mk mtcs bk 6 page3 33	
	6  \$ 1	M E A S U	<b>LENGTH, MASS AND CAPACIT Y</b>	<b>Finding the sides, area and perimeter</b>	The learner 1. Finds the value of the unknowns. 2. Calculates	The learner explains the meaning of words such as length, width,	<b>Example</b> 1. ABCD is a rectangle. Use it to answer the questions	Guided discovery  Problem solving	Assertiven ess,  Problem solving	Attempting the trial numbers given by the teacher.	Chalkboa rd illustratio n	Mk mtcs book6 page3 34	

		<b>R E M E N T</b>			the area of the rectangle. 3. Finds its perimeter.	perimeter and area.	that follow  1)Find the value of x 2) Find the actual length and width of the rectangle. 3) Find its area and perimeter.	Class discussion	and  audibility	Doing the evaluation exercise			
2	2 & 3		<b>LENGTH, MASS AND CAPACITY</b>	<b>Area of shaded parts of rectangles</b>	The learner 1.Finds the length and width of the rectangles 2. Calculates the area of the shaded rectangles.	The learner explains the meaning of words such as length, width, perimeter and area.	<b>Example</b> 1.Use the figure below to answer the questions that follow  a) Find the length and width of the outer rectangle. b) Calculate the area of the shaded part.	Brainstorming  Class discussion  Problem solving	Appreciation of oneself and others,  Problem solving  and assertiveness	Answering the oral questions  Doing the evaluation exercise	Chalkboard illustration	Mk mtcs bk 6 page3 36  Functional mtcs book 6 page	
	4 \$ 5	<b>M E A S U R E M E N T</b>		<b>Finding the unknowns by comparing areas of triangles.</b>	The learner 1. Finds the base of the triangle.  2. Finds the height of the triangle.	The learner explains the meaning of words such as bases, height and comparing areas of triangles.	<b>Example</b> 1.ABD is a triangle, AC and BE are heights of the same triangle. BD=12cm, AC=10cm and BE=8cm as shown below.	Guided discovery  Problemsolving	Assertiveness,  Problem solving  and  audibility	Answering the given oral questions  Doing the	Chalkboard illustration	Mk mtcs bk 6 page3 41	

							Find the length of AD	Class discussion		class exercise			
2	6 \$ 1		<b>LENGTH, MASS AND CAPACITY</b>	<b>Area of a trapezium</b>	The learner 1. Finds the area of a trapezium. 2. Calculates the missing side of the trapezium. 3. Finds the perimeter of the trapezium	The learner pronounces the word trapezium and also identifies the two parallel sides.	<b>Example</b> 1. Use the trapezium below to answer the questions that follow  a) Calculate the area of the figure above. b) Find its perimeter.	Class discussion  Problemsolving  Guided discovery	Appreciation of oneself and others,  Problem solving and assertiveness	Answering the oral questions.  Attempting the given evaluation exercise	Chalkboard illustration	Mk mtcs bk 6 page 344  Understanding mtcs bk 6 page	
3	2 \$ 3			<b>Area of a parallelogram and a rhombus</b>	The learner 1. Finds the perimeter of the rhombus.  2. Calculates the area of the rhombus.	The learner reads and draws the parallelogram and the rhombus.	<b>Example</b> 1. The figure below is a rhombus, use it to answer the questions that follow:-  a) Find its area b) Find its perimeter	Guided discovery Problem solving  Class discussion	Assertiveness,  Problem solving and audibility	Doing the given class exercise	A chart showing the area and perimeter of a rhombus  Chalkboard illustration	Mk mtcs bk 7 page  Functional mtcs bk page	

	4	<b>M E A S U R E M E N T</b>		<b>Area of a kite</b>	The learner 1. Draws a kite and shows the lines of symmetry. 2. Finds the area of the kite.	The learner reads and uses the words such as kites, lines of symmetry.	<b>Example</b> 1. Use the kite below to answer the questions that follow:  a) Find the area of the figure above. b) Work out its perimeter.	Class discussion  Problemsolving  Guided discovery	Creative thinking, Fluency and problem solving	Answering the oral questions  Doing the evaluation exercise.	Chalkboard illustration  Chalkboard illustration	Mk mtcs bk 7 page  Mk mtcs bk 7 page	
	5 & 6			<b>Volume and total surface area of a cube</b>	The learner: finds total surface area and volume of a cube. Finds the side given volume or total surface area of a cube.	The learner: explains the difference between a cube and a cuboid.	<b>A cube has one side 10cm. Find its volume and total surface area</b>	. Class discussion  Guided discovery  Brain storming.	Critical thinking.  Problem solving  Fluency	Answering oral questions Attempting given work Sharing with others views.	Realia Tables Chalkboard illustration.	Mk book six page	
4	1 & 2		<b>LENGTH, MASS AND CAPACITY</b>	<b>Finding the volume of a cuboid in litres</b>	The learner 1. Finds the volume of a cuboid in cubic centimeters. 2. Converts the cubic centimeters to litres	The learner describes volume, area and total surface area.	<b>Example</b> 1. The figure below is cuboid.  Find the volume of the figure above in litres.	Brainstorming  Class discussion Guided discovery	Appreciation of oneself and others,  Problem solving  and assertiveness	Doing the given class exercise	Chalkboard illustration	Mk mtcs bk 6 page 359 Functional mtcs bk 6 page	
	3 &			<b>Packing cubes and</b>	The learner finds :	The learner: describes	<b>Example. How many</b>	Guided discovery	Self respect	Packing cubes and	Real boxes	Mtc bk 7 page	

	4			<b>cuboids in cartons</b>	1. number of layers required along the height. 2. finds total number of cubes and cuboids to be packed. 3. Calculates volume of space wasted.	process of finding the number of cubes in a carton.	<b>cubes of length 5cm can be packed in a box of length 16cm, width 13cm and height of 20cm?</b>	Class discussion Brain storming.	Problem solving Creative thinking.	counting number of cubes Attempting oral and written work.	Transparent glass cuboids		
	5 \$ 6			<b>Circumference of a circle</b>	The learner 1. Finds the circumference of a circle. 2. Finds the circumference and perimeter of a semicircle.	The learner explains what a circle, semicircle and circumference are	<b>Example</b> 1. Calculate the circumference of a circle whose diameter is 14cm.  2. find the circumference of a circle whose radius is 20dm.	Guided discovery  Problemsolving  Class discussion	Creative thinking,  Fluency  and  problem solving	Answering the oral questions  Doing the given evaluation exercise	Chalkboard illustration	Mk mtcs bk 6 page 3 27	
5	1 \$ 2		<b>LENGTH, MASS AND CAPACITY</b>	<b>Area of a circle</b>	The learner 1. Finds the area of a circle when given the radius or the diameter.  2. Finds the radius when given the	The learner explain what a circle, semicircle and circumference are	<b>Example</b> 1. Given that the radius of a circular compound is 7m, calculate its area.  2. The area of a circle is	Problem solving  Guided discovery  Class discussion	Effective communication,  Listening to others  Responding confidently	Answering the given class exercise	Chalkboard illustration	Mk mtcs bk 7 page  Functional mtcs bk 7 page	

					area.		616cm. Find its radius		y to questions asked				
	3 & 4 & 5	<b>N U M E R A C Y</b>	<b>INTEGER S</b>	<b>Review of the work on addition and subtraction of integers</b>	The learner 1. Uses the number line to add integers. 2. Uses the number line to subtract integers.	The learner explains the difference between positive and negative integers.	<b>Example</b> Use number lines to work out the following a) $+3 + -7$ b) $+8 + -2$ c) $-5 - 8$	Guided discovery  Problemsolving	Creative thinking,  Fluency  and  problem solving	Doing the class exercise  Practical activity involving number lines	Chalkboard illustration	Mkmtcs bk6 page 199  Understanding mtcs bk 6 page	
	6 And 1			<b>Multiplication and division of integers</b>	The learner 1. Uses number line to multiply integers.	The learner describes the use of a number line.	<b>Examples</b> Using a number line, multiply the following integers: a) $+3 \times +6$ b) $-6 \times -3$ c) $+3 \times -4$	Demonstration method  Guided discovery  Problemsolving	Effective communication, Listening to others Responding confidently to questions asked	Practical activity involving number lines  Doing the class exercise	A chart showing the multiplication of integers	Mk mtcs bk 6 page 205	
6	2 & 3	<b>N U M E R A C Y</b>	<b>INTEGER S</b>	<b>Application of integers</b>	The learner 1. Applies the knowledge of integers to work out different mathematical problems.	The learner explains the difference between positive and negative integers.  The learner also describes the use of a number line.	<b>Example</b> 1. A frog jumped 3 steps four times before diving into the swimming pool. Calculate the distance moved by the frog.	Demonstration Problem solving  Class discussion	Creative thinking, Fluency and problem solving	Attempting the given evaluation exercise	Chalkboard illustration	Mk mtcs bk6 page 206	

6	4 & 5 & 6			<b>Application of finite system</b>	The learner: solves problems that require use of finite seven and twelve respectively.	<b>The learner explains when to use finite seven or twelve.</b>	Example. Today is Tuesday what day of the week will it be 25 days from today?	Guided discovery.  Problem solving  Demonstration.	Critical thinking Analyzing Respecting others views.	Sharing experiences Asking questions Attempting given activities.	Calendar s wall clocks.	Mk bk 6 page	
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