

**MATHEMATICS SCHEMES OF WORK**  
**STANDARD 8**

## MATHEMATICS SCHEMES OF WORKSTANDARD 8

### TERM 1

WEEK	LESSON	TOPIC/SUB TOPIC	OBJECTIVES	T/L ACTIVITIES	REFERENCES	T/L AIDS	REMARK
1	<b>Opening and Revision</b>						
2	1 - 7	NUMBERS Place values and total values. Square and square roots. LCM, GCD and divisibility test. Fractions	The learner should be able to: Read and write numbers in symbols and in words. Work out squares of numbers and square roots of perfect squares. Convert fractions and percentages into percentages and fractions. Convert decimals to percentages and percentages into decimals. Write the place values and total values of numbers.	Writing total values and place values. Finding square and square roots. Reading and writing numbers in symbols and in words. Converting fractions into percentages and percentages into fractions. Converting decimals into fractions and fractions into decimals. Working out LCM , GCD and divisibility test	Understanding math pg 1 - 14 Progressive math pg 1 - 6 Learning mathematics pg 5 - 13	A chart	
3	1 - 7	OPERATION ON NUMBERS. Operations involving whole numbers. Combining operations. Operation	Work out problems involving operations of whole numbers. Work out problems involving operations on fractions. Work out problems involving operation in decimals. Work out problems involving combined operation. Work out problems involving percentage increase and	Working out problems on whole numbers. Work out operations on fractions Work out operations on decimals Working out sums on combined operations. Working out problems on percentage increase.	Understanding mathematics pg 16 - 43 Progressive math pg 10 - 13 Learning math pg 41 - 46	A chart	
		Involving: fractions and decimals. Percentage increase and decrease.	Decrease. Work out problems in number sequence	and decrease. Working out problems on number sequence.			

		Number sequence.					
<b>4</b>	<b>1 - 7</b>	<b>END OF MONTH EXAMS</b>					
<b>5</b>	1 - 7	LENGTH/MEASUREMENT Units of length Area Surface area Volume Capacity Mass	Workout problems involving units of length. Work out problems involving area and surface area. Work out problems involving volume. Working out problems involving units of capacity. Convert units of capacity to units. Work out problems involving mass	Work out problems involving units of length Work out problems involving area and surface area. Work out problems involving volume. Work out problems involving units of capacity. Converting units of capacity to units of volume. Working out problems involving mass	Understanding math pg 48 - 78 Progressive math pg 36 - 84 Learning math pg 54 - 89	A chart	
<b>6</b>	1 - 7	MEASUREMENT Profit and loss Percentages profit and loss Bills Commission and percentage commissions Discount and percentage discount. Hire purchase Simple interest	Work out problems involving profit and loss Percentage profit and loss. Work out problems involving bills. Work out problems involving discounts percentage discount, commission and percentage commission. Work out problems involving hire purchase. Work out problems involving simple interest. Work out problems involving compound interest using simple interest per unit time. Work out problems involving postal charges.	Work out profit, loss, percentage profit and loss. Working out problems on bills. Working out problems on discount percentage discount, commission and percentage commission. Working out problems involving hire purchase. Working out simple and compound interest. Working out examples.	Understanding math pg 89 - 121 Progressive math pg 94 - 111 Learning math pg 91 - 110	A chart	
<b>7, 8 &amp; 9</b>	<b>1 - 7</b>	<b>Revision, mid term exams</b>					
10	1 - 7	TIME SPEED AND TEMPERATURE	The learner should be able to: Work out problems involving time and speed. Work out problems involving distance and average speed. Work out problems involving temperature in degrees siliceous.	Working out problems involving time and speed. Working out examples involving distance and average speed. Temperature and degrees siliceous	Understanding math pg 48 - 54 Learning math pg 111 -117	A chart clock	

WEEK	LESSON	TOPIC/SUB TOPIC	OBJECTIVES	T/L ACTIVITIES	REFERENCES	T/L AIDS	REMARK
11 And 12	1 - 7  1 - 7	GEOMETRY Construction of a Pythagorean relationship	construct triangle Construct circles touching the three sides of the triangle. Work out problems using Pythagorean relationship. Construct parallelograms and rhombuses Work out problems involving properties of squares, rectangles, parallelograms, rhombuses and trapeziums. Recognize and identify triangles and square based pyramids Identify and make nets of pyramids and prisms. Make geometrical patterns	Constructing triangles. Draw a perpendicular from a point to a line. Constructing a circle. Working out problems involving Pythagorean relationship. Constructing parallelograms and rhombuses. Working out problems involving properties of square, rectangles, parallelograms, rhombuses and trapezium. Identifying triangular and square based pyramids Making nets Making geometrical patterns.	Understanding math pg 147 - 183 Progressive math pg 56 - 68 Learning math pg 118 - 138	A chart Cut outs of patterns Geometrical sets	
13	1 - 7	<b>Revisions and Preparations for End Term Exams</b>					
14	<b>End Term 1 Exams and Closing</b>						

## TERM 2

WEEK	LESSON	TOPIC	SUB TOPIC	OBJECTIVES	T/L ACTIVITIES	T/L AIDS	REFERENCE	REMARK
1	1 - 7	<b>Opening and Revisions</b>						
2	1 - 7	MEASURE MENT Length perimeter and area	Length and circumference	Be able to: Work out problems involving conversions showing units of length. Convert mm to cm and vice versa. Convert dm, Dm, Hm, to Km and vice versa. Work out perimeter of squares, rectangles and triangles.	Conversions of units of length. Discussing relationship of units. Working out operations.	Water Containers Ruler.	Primary math pg 88 - 95 Understanding math pg 89 - 101	

				Work out problems involving circumference correctly.				
3	1 - 7	MEASUREMENT	Area and surface area.	Be able to: Work out problems involving areas of triangles and quadrilaterals. Work out problems involving area of circles correctly. Work out problems involving area of combined shapes and borders. Work out problems involving area of	Reading and interpreting problems. Finding areas of triangles and quadrilaterals. Calculating the area.	Worked out examples on a chart.	Primary math pg 96 - 107 Understanding math pg 102 - 112	
4	1 - 7	Revision and end month exams						
5	1 - 7	MEASUREMENT	Surface area	Be able to: Work out surface area of cubes. Work out surface area of cuboids. Work out surface area of cylinders. Work out curved surface areas of cylinders	Observing open and closed boxes. Cutting and opening boxes and cylinders.	Boxes Cylinders	Primary math pg 108 - 113 Understanding math pg 113 - 120	
6	1 - 7	MEASUREMENT	Volume of cubes, cuboids, cylinders and triangular prisms.	Be able to: Work out volume of cuboids. Work out problems involving volumes of cubes. Work out problems involving cylinders and triangular prisms. Work out problems involving capacity. Convert units of capacity to units of volume and vice versa.	Observing cubes and cuboids. Working out volumes. Working out capacity.	Coins Cylinders Boxes.	Primary math pg 114 - 125 Understanding math pg 121 - 127	
7	1 - 7	Revision and mid term exams						
8	1 - 7	MEASUREMENT	Mass Money	Be able to: Work out problems involving mass. Converting different quantities of mass.	Comparing mass Working out problems. Involving percentage	Bills Weights.	Primary math pg 128 - 139 Understanding math pg 128 - 144	

				Work out problems involving percentage profit and loss. Read and design bills. Work out problems involving bills	Designing bills			
9-13	Revisions and Preparations for End Term Exam							
14	End Term 11 Exams and Closing							

## TERM 3

WEEK	LESSON	TOPIC	SUB TOPIC	OBJECTIVES	T/L 1 ACTIVITIES	T/L RESOURCE	T/L AIDS	REMARK
1	1 - 7	<b>REVISION OF HOLIDAY HOMEWORK</b>						
2	1 - 7	POSTAL CHARGES	Postal charges. Money order Postal orders. telegram	Be able to: Work out problems involving postal charges. Recognize and identify money orders and postal charges. Work out problems involving telegrams.	Reading Interpreting postal charges and international postal charges. Working out problems involving postal charges.	Primary math pg 92 - 99 Understanding math pg 101 - 113	Money orders Letters	
3	1 - 7	TIME, SPEED AND TEMPERATURE	Time Speed Distance Temperature	Be able to work out distance given speed and time. Time given distance and speed. Average speed given distance and time. Work out problems involving temperature in degrees Celsius	Converting speed from km/h into m/s and vice versa. Reading and interpreting travel tables. Calculations of speed, time and distance.	Primary math pg 171 - 184 Understanding math pg 119 - 134	Clock Thermometers.	
4	1 - 7	SPEED AND TEMPERATURE	Temperature in degrees Celsius	Be able to : Work out average speed given speed and time. Work out problems involving temperatures in degrees Celsius.	Reading thermometer Tell increase or decrease in scale	Primary math pg 184 - 185 Understanding math pg 134 - 136		
5-8	Revisions, Class work and preparations for End Term Exams							

9	End Term 111 Exam and closing	
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