PRIMARY SIX MATHEMATICS SCHEMES OF WORK-TERM ONE 2023

WK	PD	THEME	TOPIC	SUBTOPIC	SUBJECT COMP	LANG. COMP	CONTENT	METHOD	ACTIVITY	LIFE SKILLS	AVA	REF	REM
2	1 & 2	**S E T S**	**SETS concept.**	**Review of the p.5 work**	The pupil 1. Identifies complements of sets. 2.finds the number of subsets & proper subsets 3. Works out simple application of sets.	The learner describes the complements of sets. The learner defines the terms subset and proper subsets.	-Complement of sets. . -Subsets & proper subsets - Simple application of sets.	Guided discovery Problem solving Discussion	Answering the oral questions Doing the class exercise	Fluency Creative thinking Sharing	A chart showing compliment of sets.	Mk mtcs bk 5 Mk mtcs bk6 page 5-6 Fountain maths bk 6 pg 8--15	
	3 & 4			**Application of subsets and proper subsets**	1. Applies the formula to get the number of elements in a given set. 2. Uses the formula to get the number of members.	The learner explains the following terms: subsets and proper subsets.	1. How many elements are in a set with 32 subsets. 2. Calculate the number of members in a set with 63 proper subsets.	Problem solving Brain storming Guided discovery	Answering the oral question asked by the teacher.	Confidence Critical thinking. Self esteem	Chalkboard illustration.	Fountain mtcs bk Mk mtcs bk 7 page 3-- 4	
				Application of sets.	The pupil 1. Draws Venn diagram. (2 case).	The learner describes the informatio	**<u>Example</u>** 1.Given that the	Guided Discovery problem solving	Drawing the Venn diagrams	Self esteem	A chart Sho	Functional Mtcs bk6 pg10	

	5 & 1				2. Correctly answers questions from the Venn diagram.	n given on a Venn diagram	n(A) = 10 , n(B) = 15 and n(AnB) = 6 a) Show the above information on a Venn diagram. b)Find n(A-B) c)n(A-B)	Class discussion	Answering the oral questions.	Confidence Problem solving	wing the questions involving the Venn diagram	Understanding mtcs bk6 pg 14 Mk mtcs bk6 pg23	
3	2 & . 3	**SETS**	**SETS**	**More about application of sets.**	The pupil should be able to:- 1.show information on Venn diagrams 2.Find the value of the unknowns	The learner describes the different ways though which a Venn diagram may be used to represent information.	**Example** 1. In a class of 40 pupils, 20 pupils like English (E) while 25 pupils like Math (M) and some pupils like both subjects. a) Show the above on the Venn diagram. b) How many pupils like both subjects? c) Find the probability of picking a pupil who likes only one	Guided discovery Problem solving Discussion	Doing the class exercises Answering the oral questions	Cooperation Effective communication Critical thinking	Chalkboard illustration A chart showing the application of Venn dia	Understanding mtcs bk6 pg 14 Mk mtcs bk6 pg 29	

							subject to be the class captain?				gra ms.		
	4			**Probabili ty**	The pupil 1.Lists the sample space of a coin and adice 2. Finds the chance of an event occurring.	The learner defines the term probability. The learner describes how to find probability The learner lists the sample space.	Probability is how likely something is to happen. **Example** 1. What is the probability that it will rain on a day starting with letter "T". 2. If a coin is tossed at once. What is the probability of ahead showing up? 3. When a dice is tossed once, What is the probability of scoring a prime number?	Problem solving Guided discovery Class discussion	Sharing ideas on probabilit y. Answering the given class exercise.	Interpe rsonal skills Creativ e thinkin g Decisio n makin g	A cha rt sho win g the Car tesi an pro duc ts.	Mk mtcs bk6 pg30 , Mk mtcs bk7 pg 189	
	5	**S E T S**	**SETS**	**Applicati on of probabili ty**	The pupil 1. Finds the probability of an event occurring. 2. Works out problems involving the	The learner identifies ways through which probability may be used in our	**Example** 1. The probability that it will rain today is 2 .What 3 is the probability	Guided discovery Problem solving Discussio n	Answering the given oral questions Doing the given	Fluenc y Coope ration Proble m solving	Ch alkb oar d illust rati on	Fountain Mtcs bk6 page 22 Mk mtcs book 6 page 192	

					application of probability.	day today lives.	that it will not rain today? 2. Given that a bag has 8 blue pens and 6 red pens. What is the probability of picking a red pen?		class exercise.				
4	1 2 3 & 4	**NUMERACY**	**WHOLE NUMBERS**	**Review of the p.5 work**	The pupil :- 1. Reviews the place values and values of wholes up to millions. 2.Review writing figures in words up to millions and vice versa 3.Rounds off whole numbers 4. Reviews roman numerals up to 2000.	The learner explains the difference between place values and values. The learner also identifies the roman numerals up 2000.	- Place values and values of wholes. -Writing figures in words and vice versa -Rounding off whole numbers. -Roman numerals up to 2000.	Guided discovery Problem solving discussion	Doing the revision exercise Doing the correction	Critical thinking Effective communication Fluency	Chalk board illustration.	Mk mtcs bk 6 pg 47 Mk mtcs bk6 page 30 Fountain mtcs bk6 page 37 - 41	
	5	**NUMERACY**	**WHOLE NUMBERS**	**Expanding numbers using powers or exponents.**	The pupil : 1. Identifies the powers of each digit. 2. Expands numbers using powers of base ten.	The learner explains the relationship between place values and powers.	**<u>Example</u>** **1.** Expand 345672 using powers of base ten. 2.What number has been expanded to	Guided discovery Problem solving Class discussion	Answering the oral questions.	Fluency Cooperation Problem solving	A chart showing the expansion	Mk mtcs bk7 pg49 Fountain mtcs bk 6 page 27 - 28	

					3. Finds the expanded number.		give $(3x10^3)$ $+(6x10^2)$ $+(4x10^1)$ $+(9x10^0)$.				of numbers using the powers of ten.		

5	1 2 & 3		**OPERATION ON WHOLE NUMBERS.**	**Review on multiplication and division of whole numbers**	The learner : 1. Adds and subtracts whole numbers up to millions. 2. Multiplies up to 3 digits by 3 digit numbers. 3.Dividing whole numbers by 3 digits	The learner explains the terms products and quotient.	**Example** 1.Multiply 325x 56 2.Divide 3684 by 12	Guided discovery Problem solving Class discussion	Answering the oral questions. Reciting and applying tables.	Communication Fluency problem solving	Chalk board illustration.	MK mtcs bk 6 page 58 – 61 MK mtcs bk7 page 46	
	4			**Review on addition and subtraction of bases.**	The learner: 1. Reviews addition and subtraction of bases.	The learner explains the steps taken to add or subtract bases.	**Example** 1. Add 213five +13five 2. Subtract 212three from 221 three	Guided discovery Problem solving Class discussion	Answering oral questions	Communication Fluency problem solving	Chalk board illustration Counters	Fountain mtcs book 6 page 223—225 Mk mtcs bk 7 page 40- 41	
6	5 & 1		**OPERATION ON WHOLE NUMBERS**	**Changing from one base to another**	The pupil : 1. Changes given bases to decimal base. 2. Changes from the decimal base to other bases.	The learner explains the meaning of decimal base,	**Example** 1. Covert 112 three to decimal base. 2. Change 212 four to base five.	Guided discovery Problem solving discussion	Answering the oral questions Doing the class exercise	Appreciation of other peoples'	Chalk board summary	Mk mtcs bk7 pg39 Fountain mtcs bk 6	

						binary base.				views Cooperation Sharing		page 227 - 229	
	2	**NUMERACY**		**Finding the unknown base.**	The pupil : 1. Finds the value of the unknown base. 2. Converts other bases to base ten.	The learner describes the steps required to change from one base to another.	**<u>Example</u>** 1.Find the value of x in $21_x = 32_{five}$ 2. Calculate the value of y in :- $31_y = 15_{ten}$.	Discussion Guided discovery Problem solving	Discussing the examples Doing the class exercise	Critical thinking Problem solving	Chalkboard illustration	Fountain mtcs bk 6 page 230	

	3		**OPERATION ON WHOLE NUMBERS**	**Standard/scientific notation**	The pupil : 1. express whole numbers in scientific form 2. express decimals	The learner explains the term scientific notation or	**<u>Example:</u>** 1. express 1489 in standard form 2. What is 0.004543 in	Class discussion Guided discovery Problem solving	Doing the class exercise	Critical thinking Cooperation	Chalkboard illustration	MK mtcs bk7 page 50	

					in scientific form	standard form.	scientific form?			Problem solving			
6	4 & 5			**Indices (powers or exponents)**	The pupil : 1. memorizes the laws of indices 2. Work out problems involving the laws of indices.	The learner recites the first, second and third laws of indices accurately	**Example:** 1. simplify $4^3 x 4^5$ 2. simplify $5^2 x 5^4$ 3. Simplify $6^5 \div 6^3$	Class discussion Guided discovery Problem solving	Answering the oral question	Fluency Effective communication Creative thinking	Chalkboard illustration	MK mtcs bk7page 51- 52 Functional mtcs bk6 pg	
	1 & 2	**NUMERACY**	**OPERATION ON WHOLE NUMBERS**	**Solving unknown indices (Application of indices)**	The pupil : 1. solves for the unknown bases	The learner recites the first, second and third laws of indices accurately	**Example** 1. Solve $2^y = 32$ 2.Solve $3^{2p} = 3^8$ 2.Solve $2^x x 3^3 = 108$	Class discussion Guided discovery Problem solving	Doing the class exercise	Critical thinking Cooperation Problem solving	Chalkboard summary	MK mtcs bk7 page 53	
7	3 4 &		**NUMBER PATTERNS AND SEQUENCES**	**Review of P.5 work**	The learner: 1. Identifies the different types of numbers. 2. Finds the squares and square	The learner reads the vocabulary such as squares and square roots,	-Types of numbers. -Squares and Square root of numbers. -L.C.M and G.C.F -Representing prime factors	Guided discovery Problem solving Discussion	Answering the given oral questions Identifying the squares of given	Fluency Effective communication Creative	Chalkboard illustration	MK primary Mtc bk 6 page Fountain Mtc	

	5				roots of numbers. 3.Calculates the L.C.M and G.C.F 4.Represents prime factors on the Venn diagram	explains the difference between L.C.M and G.C.F	on the Venn diagram.		numbers.	thinking		bk6 page	
8	1			**Relationship between LCM and GCF**	The pupil should be able to: 1. Calculate the value of the GCF when given the LCM and the numbers. 2. find the missing numbers when given the GCF and LCM	The learner describes the relationship between GCF, LCM and the product of the numbers.	**Example:** 1. Given that the LCM of 16 and y is 48 and their GCF is 4. Find the value of y. 2. The product of two numbers is 60 and their GCF is 6. Find the LCM	Class discussion Guided discovery Problem solving	Doing the class exercise	Creative thinking Critical thinking Effective communication	Chalkboard summary	Primary mathematics for Uganda bk6 page 52	
	2 &	**NUMER**		**Application of LCM**	The pupil should be able to: 1. Apply LCM in	The learner describes the different ways	**Example:** 1. Find the smallest number that can be divided by 4	Class discussion Problem solving	Answering the given oral questions	Critical thinking Cooperation	Summary on chalkboard	Primary mathematics for	

	3	**A C Y**			their day to day life. 2. work out correctly questions involving the applicatio n of LCM	through which the knowled ge of LCM may be applied.	or 6 leaving the remainder as 2. 2. In a school, two bells are rung at intervals of 30 minutes and 40 minutes respectively to change lessons. After how long will the two bells ring together again?	Guided discovery	Attempti ng the given evaluati on exercise	Proble m solving		Ugan da Bk6 page 53	
8	4			**Divisibility test of 9 and 11**	The learner 1. Applies divisibility tests for 9 and 11 when carrying out division.	The learner describe s the divisibilit y tests for 9 and 11.	-Test for 9 -Test for 11	Problem solving Guided discovery Class discussion	Answerin g the oral question Doing the given exercise	Critical thinkin g Coope ration Proble m solving	Ch alkb oar d illust rati on	MK mtcs bk 7 page 62	
	5		**NUMBE R PATTER NS AND SEQUE NCES**	**Consecutive counting / whole numbers or integers**	The pupil should be able to: 1. find the required consecutiv e counting numbers	The learner describe s the meanin g of consecu tive even,	**<u>Example:</u>** 1. The sum of three consecutive counting numbers is 36. Find these numbers	Class discussion Guided discovery brainstorm ing	Answerin g the oral question Doing the	Creativ e thinkin g Critical thinkin g	A cha rt sho win g how to find	MK mtcs bk6 pg 76 Unde rstan ding mtcs	

						odd and whole numbers.			given exercise	Effective communication	the consecutive counting numbers	bk6 pg 82	
9	1	**NUMERACY**		**Consecutive odd and even numbers**	The pupil should be able to:- 1. Find the consecutive odd numbers 2. find the consecutive even numbers	The learner describes the meaning of consecutive even, odd and whole numbers	**<u>Example</u>** 1. The total of four consecutive odd numbers is 32. What are these numbers? 2. Find the three consecutive even numbers whose sum is 78	Class discussion Guided discovery Brain storming	Answering the oral questions Doing the class exercise	Critical thinking Cooperation Problem solving	Chalkboard summary	MK mtcs bk6 pg 76 Understanding mtcs bk6 pg 86	
	2		**NUMBER PATTERNS AND SEQUENCES**	**More about consecutive even, odd and counting numbers**	The pupil should be able to :- 1. Answer questions involving more about consecutive even, odd and	The learner describes the meaning of consecutive even, odd and	**<u>Example</u>** 1. The sum of three consecutive even numbers is 54. Find the numbers, given that y is the largest. 2. The median of	Problem solving Guided discovery Class discussion	Doing the class evaluation exercise	Critical thinking Cooperation Problem solving	Chalkboard illustration	Supplementary revision book 5, 6, 7 page	

					counting numbers.	whole numbers	three consecutive even numbers is n. Find the numbers if their total is 24.						