PRIMARY SIX MATHEMATICS SCHEMES OF WORK-TERM ONE

WK	PD	THEME	TOPI C	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	

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	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	Chalk board illustration.	Fountain mtcs bk Mk mtcs bk 7 page 3-- 4	
	5 & 6			**Application of sets.**	The pupil 1. Draws Venn diagram. (2 case). 2. Correctly answers questions from the Venn diagram.	The learner describes the information given on a Venn diagram	**<u>Example</u>** 1.Given that the 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)	Guided Discovery problem solving Class discussion	Drawing the Venn diagrams Answering the oral questions.	Self esteem Confidence Problem solving	A chart Showing the questions involving the Venn diagram	Functional Mtcs bk6 pg10 Understanding mtcs bk6 pg 14 Mk mtcs bk6 pg23	
3	1 & . 2	**S E T S**	**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**<u>.</u>**	**<u>Example</u>** 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?	Guided discovery Problem solving Discussion	Doing the class exercises Answering the oral questions	Cooperation Effective communication Critical thinking	Chalk board illustration A chart showing the application of Venn	Understanding mtcs bk6 pg 14 Mk mtcs bk6 pg 29	

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							c) Find the probability of picking a pupil who likes only one subject to be the class captain?				diagrams.		
	3			**Probability**	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 probability. Answering the given class exercise.	Interpersonal skills Creative thinking Decision making	A chart showing the Cartesian products.	Mk mtcs bk6 pg30 , Mk mtcs bk7 pg 189	
	4	**S E T S**	**SETS**	**Application of probability**	The pupil 1. Finds the probability of an event occurring. 2. Works out problems involving the application of probability.	The learner identifies ways through which probability may be used in our day today lives.	**Example** 1. The probability that it will rain today is 2 .What 3 is the probability 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?	Guided discovery Problem solving Discussion	Answering the given oral questions Doing the given class exercise.	Fluency Cooperation Problem solving	Chalk board illustration	Fountain Mtcs bk6 page 22 Mk mtcs book 6 page 192	

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3 4	5 6 & 1 & 2	**N U M E R A C Y**	**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 Eff ective communication Fluency	Chalk board illustration.	Mk mtcs bk 6 pg 47 Mk mtcs bk6 page 30 Fountain mtcs bk6 page 37 - 41	
	3 & 4	**N U M E R A C Y**	**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. 3. Finds the expanded number.	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 give $(3x10^3)$ $+(6x10^2)$ $+(4x10^1)$ $+(9x10^0)$.	Guided discovery Problem solving Class discussion	Answering the oral questions.	Fluency Cooperation Problem solving	A chart showing the expansion of numbers using the powers of ten.	Mk mtcs bk7 pg49 Fountain mtcs bk 6 page 27 - 28	

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4	5 & 6 & 1		**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	Chalkboard illustration.	MK mtcs bk 6 page 58 – 61 MK mtcs bk7 page 46	
5	2			**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	Chalkboard illustration Counters	Fountain mtcs book 6 page 223—225 Mk mtcs bk 7 page 40-41	
5	3 & 4		**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, binary 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 peopl es' views Cooperation Sharing	Chalkboard summary	Mk mtcs bk7 pg39 Fountain mtcs bk 6 page 227 - 229	
	5 & 6	**NUMER**		**Finding the unknown base.**	The pupil : 1. Finds the value of the unknown base.	The learner describes the steps required	**Example** 1.Find the value of x in 21_x = 32five	Discussion Guided discovery	Discussing the examples	Critical thinking	Chalkboard illustration	Fountain mtcs bk 6 page230	

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		A C Y			2. Converts other bases to base ten.	to change from one base to another.	2. Calculate the value of y in :- $31_y = 15_{ten}$.	Problem solving	Doing the class exercise	Problem solving			
	1		**OPERATION ON WHOLE NUMBERS**	**Standard/scientific notation**	The pupil : 1. express whole numbers in scientific form 2. express decimals in scientific form	The learner explains the term scientific notation or standard form.	**Example:** 1. express 1489 in standard form 2. What is 0.004543 in scientific form?	Class discussion Guided discovery Problem solving	Doing the class exercise	Critical thinking Cooperation Problem solving	Chalk board illustration	MK mtcs bk7 page 50	
6	2 & 3			**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 $4^3 \times 4^5$ 2. simplify $5^2 \times 5^4$ 3. Simplify $6^5 \div 6^3$	Class discussion Guided discovery Problem solving	Answering the oral question	Fluency Effective communication Creative thinking	Chalk board illustration	MK mtcs bk7page 51- 52 Functional mtcs bk6 pg	

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	4 & 5	**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	Chalk board summary	MK mtcs bk7 page 53	
6	6 & 1 & 2		**NUMBER PATTERNS AND SEQUENCES**	**Review of P.5 work**	The learner: 1. Identifies the different types of numbers. 2. Finds the squares and square roots of numbers. 3.Calculates the L.C.M and G.C.F 4.Represents prime factors on the Venn diagram	The learner reads the vocabulary such as squares and square roots, explains the difference between L.C.M and G.C.F	-Types of numbers. -Squares and Square root of numbers. -L.C.M and G.C.F - Representing prime factors on the Venn diagram.	Guided discovery Problem solving Discussion	Answering the given oral questions Identifying the squares of given numbers.	Fluency Effective communication Creative thinking	Chalk board illustration	MK primary Mtc bk 6 page Fountain Mtc bk6 page	
7	3			**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.	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	Chalk board summary	Primary mathematics for Uganda bk6 page 52	

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					2. find the missing numbers when given the GCF and LCM								
	4 & 5	**N U M E R A C Y**		**Application of LCM**	The pupil should be able to: 1. Apply LCM in their day to day life. 2. work out correctly questions involving the application of LCM	The learner describes the different ways through which the knowledge of LCM may be applied.	**Example:** 1. Find the smallest number that can be divided by 4 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?	Class discussion Problem solving Guided discovery	Answering the given oral questions Attempting the given evaluation exercise	Critical thinking Cooperation Problem solving	Summary on chalk board	Primary mathematics for Uganda Bk6 page 53	
7	6			**Divisibility test of 9 and 11**	The learner 1. Applies divisibility tests for 9 and 11 when carrying out division.	The learner describes the divisibility tests for 9 and 11.	-Test for 9 -Test for 11	Problem solving Guided discovery Class discussion	Answering the oral question Doing the given exercise	Critical thinking Cooperation Problem solving	Chalk board illustration	MK mtcs bk 7 page 62	
8	1 & 2		**NUMBER PATTERNS AND SEQUENCES**	**Consecutive counting / whole numbers or integers**	The pupil should be able to: 1. find the required consecutive counting numbers	The learner describes the meaning of consecutive even, odd and whole numbers.	**Example:** 1. The sum of three consecutive counting numbers is 36. Find these numbers	Class discussion Guided discovery brainstorming	Answering the oral question Doing the given exercise	Creative thinking Critical thinking Effective communication	A chart showing how to find the consecutive counti	MK mtcs bk6 pg 76 Understanding mtcs bk6 pg 82	

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											ng numb ers		
		N U M E R A C Y		**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 Cooperati on Problem solving	Chalk board summ ary	MK mtcs bk6 pg 76 Underst anding mtcs bk6 pg 86	
8	3 & 4		**NUMBE R PATTER NS AND SEQUEN CES**	**More about consecutive even, odd and counting numbers**	The pupil should be able to :- 1. Answer questions involving more about consecutive even, odd and counting numbers.	The learner describes the meaning of consecutive even, odd and whole numbers	**<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 three consecutive even numbers is n. Find the numbers if their total is 24.	Problem solving Guided discovery Class discussion	Doing the class evaluation exercise	Critical thinking Cooperati on Problem solving	Chalk board illustr ation	Supple mentary revision book 5, 6, 7 page	

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