We ek	Less on	Strand	Sub- strand	Specific-Learning outcomes	Learning Experience	Key Inquiry Question(S)	Learning Resources	Assessm ent	Reflectio n
1				OPENING A	ND RECEIVING LEARNERS			Methods	
2	1	NUMBERS	Integers	By the end of the lesson, the learner should be able to: a) Define integers b) Identify integers on a number line c) Have fun and enjoy generating integer's numbers lines in their classroom.	In groups, learners are guided to i. Define integers ii. Define number line iii. Carry out activities involving positive and negative numbers and zero.	When do we use integers in real life situation?	Number line Stairways Natural numbers Whole Numbers EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg. 1-2	Class activities Class written tests Extended activities Project observati ons	
	2	NUMBERS	Operatio ns of integers	By the end of the lesson, the learner should be able to: a) Define a number line b) Perform the four basic operations on integers using the number line c) Enjoy Performing the four basic operations on integers using the number line	In groups leaners are guided to: a) Draw and represent integers on a number line b) Illustrating and solving problems involving four basic operations on integers c) Explanations how to solve problems involving four basic operations on integers d) Discussing exercises given by the teacher on integers	When do we use integers in real life situation?	Charts showing integers Number line Stair case Ladder Thermometer Real life situations EAEP; SMART MINDS	Class activities Class written tests Extended activities Project observati ons	

						Mathematics Learner's Book Grade 8 pg3.		
3	NUMBERS	Operations of integers	By the end of the lesson, the learner should be able to: d) Define a number line e) Perform the four basic operations on integers using the number line f) Enjoy Performing the four basic operations on integers using the number line	e) Draw and represent integers on a number line f) Illustrating and solving problems involving four basic operations on integers g) Explanations how to solve problems involving four basic operations on integers h) Discussing exercises given by the teacher on integers	When do we use integers in real life situation?	Charts showing integers Number line Stair case Ladder Thermometer Real life situations EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.4	Class activities Class written tests Extended activities Project observati ons	
4	NUMBERS	Combine d operatio ns	By the end of the lesson, the learner should be able to: a) Define a number line b) Work out problems involving combined operations on integers in the correct order c) Enjoy Working out problems involving combined operations on integers in the correct order	In groups leaners are guided to: a) to perform operations on integers on correct order b) Solving problems involving combined operations on integers	How do we carry out operations of integers?	Number line Stair case Ladder Thermomet er EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.5	Class activities Class written tests Extended activities Project observati ons	
5	NUMBERS	Combine d operatio ns	By the end of the lesson, the learner should be able to: d) Define a number line e) Work out problems involving combined operations on integers in the correct order f) Enjoy Working out problems involving combined operations on integers in the	In groups leaners are guided to: c) to perform operations on integers on correct order d) Solving problems involving combined operations on integers e) Play creative games that involves number lines, for example jumping steps.	Where are integers operations applicable?	Number line Stair case Ladder Thermomet er EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.6-8	Class activities Class written tests Extended activities Project observati ons	

				correct order					
3	1	NUMBERS	Fraction s The meaning of fractions	By the end of the lesson, the learner should be able to: a) Define fractions b) Identify and write fractions in figures (proper and improper) c) Enjoy sharing equally the materials given.	In groups learners are guided to a) Make proper Definitions of fractions b) Discussions on the various types of fractions c) Solving problems involving fractions	How do we use fractions in real life situations?	Charts Illustrating operations on fractions EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.8-9	Class activities Class written tests Extended activities Project observati ons	
	2	NUMBERS	Equivale nt fractions	By the end of the lesson, the learner should be able to: a) Define equivalent fractions b) Identify and write equivalent fractions c) Enjoy sharing equally the materials given.	In pairs leaners are guided to a) Discuss about the types of fractions b) Dividing equally a given item like a piece of paper or sticks. c) Measuring the items given d) Weighing the items given e) Solving problems involving equivalent fractions	How do we use fractions in real life situations?	Sticks Pieces of paper Ruler Real life - situation Charts Illustrating operations on fractions	Class activities Class written tests Extended activities Project observati	
	3	NUMBERS	Naming fractions	By the end of the lesson, the learner should be able to: a) Name fractions correctly b) convert an improper fraction to a mixed number and vice versa c) Enjoy converting fractions	In pairs leaners are guided to a) Discussing about naming fractions b) Sharing equally the items given c) Solving problems involving fractions d) Converting fractions e) Doing excesses on fractions		Counters such as seeds, bottle tops, stones Pieces of paper Sticks EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.10-11	Class activities Class written tests Extended activities Project observati ons	
	4	NUMBERS	Adding and subtracti	By the end of the lesson, the learner should be able to: a) Name fractions correctly b) Add and subtract fractions	In pairs leaners are guided to a) Show how to add and subtract fractions.	How do we use fractions in real life situations?	Oranges Sticks Pieces of paper Counters	Class activities Class	

	5	NUMBERS	Multiplication and division of fractions	c) Enjoy adding and subtracting fractions By the end of the lesson, the learner should be able to: a) Outline types of fractions b) Perform multiplication and division of fractions c) Appreciate the role of fractions in our da to da activities	b) Discussions about adding and subtracting fractions. c) Converting Fractions In pairs leaners are guided to a) Discuss about types of fractions and how they can be multiplied together. b) Multiply fractions c) Divide fractions d) Convert fraction e) Showing the learner how to manipulate fractions	life situations?	EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.12-13 Sticks Stones Seeds Pieces of paper EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.14-15	written tests Extended activities Project observati ons Class activities Class written tests Extended activities Project observati ons	
4				CAT ONE	ASSESSMENT	TEST			
5	1	Fractions	Order of		Learners are guided to :	How do we use	Multiplication	Class	
5	1	Fractions	Order of operations	By the end of the lesson, the learner should be able to: a) Carry out combined operations on fractions on the correct order b) Promote use of fractions in real life.	Learners are guided to: a) Discuss and use the correct order of operations in fractions b) Add fractions c) Subtract fractions d) Multiply fractions e) Divide fractions f) Convert of fractions	How do we use fractions in real life situations?	Multiplication tables Conversion tables Real objects EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.16	activities Class written tests Extended activities Project observati ons	
5	2	Fractions	operatio ns	By the end of the lesson, the learner should be able to: a) Carry out combined operations on fractions on the correct order b) Promote use of fractions in	Learners are guided to: a) Discuss and use the correct order of operations in fractions b) Add fractions c) Subtract fractions d) Multiply fractions e) Divide fractions	How do we use fractions in real	tables Conversion tables Real objects EAEP; SMART MINDS Mathematics Learner's Book Grade	activities Class written tests Extended activities Project observati	

3	NUMBERS	Fraction s Revision	c) Promote the use of fractions in real life situations By the end of the lesson, the learner should be able to: a) State types of fractions b) Solve world problems involving fractions in real life situations c) Promote the use of fractions in real life situations d) Answer the questions in the student's book. Further exercises	e) Divide fractions Convert of fractions Learners are guided to: a) Discuss and use the correct order of operations in fractions b) Add fractions c) Subtract fractions d) Multiply fractions e) Divide fractions f) Convert of fractions	How do we use fractions in real life situations?	EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.17-18 Multiplication tables Conversion tables Real objects Counters EAEP; SMART MINDS Mathematics Learner's Book	Extended activities Project observati ons Class activities Class written tests Extended activities Project observati ons	
2	NUMBERS	Decimals Fraction s and decimals	By the end of the lesson, the learner should be able to: a) Define decimals b) Convert fractions into decimals c) Promote use of decimals in real life situations	LEARNERS ARE GUIDED TO a) Define fractions b) Practice concerting fractions to decimals	How do we use fractions in real life situations?	Grade 8 pg.19-21 Equivalent fractions Multiplication tables Real life situations EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.22-23	Class activities Class written tests Extended activities Project observati ons	
3	NUMBERS	Recurrin g decimals	By the end of the lesson, the learner should be able to: a) Define recurring decimal b) Identify and write recurring decimals c) write recurring decimals	Learners are guided to: a) Define fractions b) Practice concerting fractions to decimals c) Discuss and classify non-recurring and recurring decimals d) Indicate the recurring digits	How do we use fractions in real life situations?	Equivalent fractions Multiplication tables Real life situations EAEP; SMART	Class activities Class written tests Extended activities	

	4	NUMBERS	Recurrin g decimals and fractions	By the end of the lesson, the learner should be able to: a) Identify recurring decimals b) Convert recurring decimals into fractions	In groups learners are guided to: a) Guiding learner to identify recurring decimals b) Discussion on recurring decimals c) Doing exercises on recurring decimals d) Conversion e) illustrations	decimals in real life situations?	MINDS Mathematics Learner's Book Grade 8 pg.24 Equivalent fractions Multiplication tables Real life situations EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.25	Project observati ons Class activities Class written tests Extended activities Project observati ons	
	5	NUMBERS	Roundin g off decimals	By the end of the lesson, the learner should be able to: Round off a decimal number to the required number of decimal places	In groups Learners are guided to; a) Discuss and classify non-recurring and recurring decimals b) Indicate the recurring digits c) Practice converting the recurring decimals to fractions d) Discuss and round off decimal numbers t a required number of decimal places. e) Write decimals and whole numbers to given significant figures.	How do we use decimals in real life situations?	Place value charts Ruler Tape measure Objects EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.26- 27	Class activities Class written tests Extended activities Project observati ons	
6		ERM EXAM	INATION			•		,	
7 8	HALFT REVISION	ERM ON OF MIDTE	RM EXAMI	NATION					
9	1	NUMBERS	Standar d form	By the end of the lesson, the learner should be able to: a) Define standard form b) Write numbers in standard form and apply in real life	In groups Learners are guided to: a) Write numbers in standard form in learning materials such as cards or charts. b) Work out combined operations on decimals in the correct order	life situations?	place value charts measuring instruments objects <i>EAEP</i> ;	Class activities Class written tests Extended	

			situations c) Enjoy writing numbers in standard forms			SMART MINDS Mathematics Learner's Book Grade 8 pg.28- 32	activities Project observati ons	
2	NUMBERS	Addition and subtracti on of decimals	By the end of the lesson, the learner should be able to: a) Add decimals b) Subtract decimals c) Enjoy adding and subtracting decimals	In groups, learners are involved in a) Discussions about decimals b) Demonstrations on how to operate decimals c) Multiplying decimals d) Correcting errors caused by failure to manipulate decimal point correctly Doing exercises on decimals	How do we use decimals in real life situations?	Place value charts Measuring instruments such as tape measure, ruler, meter rule Regular shaped objects EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.33	Class activities Class written tests Extended activities Project observati ons	
3	NUMBERS	Multiplic ation and division	By the end of the lesson, the learner should be able to: a) Multiply decimals b) Divide decimals c) Play games of operations of decimals using it or other materials	In groups, learners are involved in e) Discussions about decimals f) Demonstrations on how to operate decimals g) Multiplying decimals h) Correcting errors caused by failure to manipulate decimal point correctly i) Doing exercises on decimals	How do we use decimals in real life situations?	Mathematical table Multiplication table Place value chart Measuring instruments Regular shaped objects EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.34-35	Class activities Class written tests Extended activities Project observati ons	

	4	NUMBERS	Combine d operation on decimals	By the end of the lesson, the learner should be able to: a) Carry out operations in the correct order b) Apply the knowledge of decimals to real life situations c) Play games of operations of decimals using it or other materials	d) e) f) g) h) i) j)	In pairs learners are involved in: Discussions on Application of decimals to real life situations Adding decimals Multiplying decimals Dividing decimals Subtracting decimals Solving puzzles in decimals Playing games involving decimals using devices	How do we use decimals in real life situations?	Place value charts Multiplication tables Mathematical tables Tape measure Meter rule Ruler Strings Regular shaped objects EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.36-37	Class activities Class written tests Extended activities Project observati ons	
	5	NUMBERS	Squares of numbers	By the end of the lesson, the learner should be able to: a) Define the term square b) Find squares of numbers by multiplication and factorization c) Enjoy using squires of numbers	a) b) c) d) e) f)	S, learners are guided to: Define a square Find squires of given numbers. Work out the squares of numbers from tables in different situations. Multiplication of squares. Memorizing squares of numbers Doing short test on squares of numbers Solving puzzles on squares.	Where do we apply squares and square roots in real life situations?	Multiplication tables Mathematical tables Calculators (scientific) EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.38-40	Squares Class activities Class written tests Extended activities Project observati ons	
10	1	NUMBERS	Squares of numbers greater than 1 and less than 10	By the end of the lesson, the learner should be able to: a) read the mathematical table b) find the squares of numbers from the mathematical table c) Enjoy finding the squares of numbers.	d) e) f) g)	Learners are guided to Define a square Find squires of given numbers. Work out the squares of numbers from tables in different situations. Multiplication of squares. Memorizing squares of numbers	Where do we apply squares and square roots in real life situations?	Mathematical tables Multiplication tables Calculators (scientific) EAEP; SMART MINDS	Class activities Class written tests Extended activities Project	

				 h) Doing short test on squares of numbers i) Solving puzzles on squares. j) Reading the mathematical table k) Emphasizing standard form l) Doing short tests on squares m) Playing games on squares of numbers 		Mathematics Learner's Book Grade 8 pg.41	observati ons	
2	NUMBERS	Squares of numbers greater than 10	By the end of the lesson, the learner should be able to: a) Read mathematical tables b) Find the square of numbers greater than 10 from the mathematical table. c) Enjoy finding the squares of numbers.	In pairs, learners are guided to: a) Define a square b) Find squires of given numbers. c) Work out the squares of numbers from tables in different situations. d) Multiplication of squares. e) Memorizing squares of numbers f) Doing short test on squares of numbers Solving puzzles on squares.	Where do we apply squares and square roots in real life situations?	Mathematical tables Multiplication tables Calculators (Scientific) EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.42	Class activities Class written tests Extended activities Project observati ons	
3	NUMBERS	Squares of numbers less than 1	By the end of the lesson, the learner should be able to: a) Read mathematical tables b) Find the squares of numbers less than 1 from mathematical tables c) Enjoy finding the squares of numbers.	In pairs, learners are guided to: a) Define a square b) Find squires of given numbers. c) Work out the squares of numbers from tables in different situations. d) Multiplication of squares. e) Memorizing squares of numbers f) Doing short test on squares of numbers Solving puzzles on squares.	Where do we apply squares and square roots in real life situations?	Mathematical tables Multiplication tables Calculators (Scientific) EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.43-45	Class activities Class written tests Extended activities Project observati	
4	NUMBERS	Finding square roots by factoriza tion	By the end of the lesson, the learner should be able to: a) Define square roots b) Find square roots of numbers by factorization c) Enjoy finding square roots of numbers	In pairs, learners are guided to: a) Define a square b) Find squires of given numbers. c) Work out the squares of numbers from tables in different situations. d) Multiplication of squares. e) Memorizing squares of numbers	Where do we apply squares and square roots in real life situations?	Mathematical tables Multiplicatio n tables EAEP; SMART MINDS Mathematics	Class activities Class written tests Extended activities Project	

					f) Doing short test on squares of numbers		Learner's Book Grade 8 pg.46	observati ons	
	5	NUMBERS	Square root tables	By the end of the lesson, the learner should be able to: a) Read the square root table b) Read square roots of numbers 1< A <10 from mathematical tables c) Enjoy finding square roots of numbers using tables	Guiding the learner to read square roots from tables a) Discussing how to find square roots of numbers b) Doing exercises on square roots of numbers	Where do we apply squares and square roots in real life situations?	Mathematical tables Multiplicatio n tables EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.47-48	Class activities Class written tests Extended activities Project observati	
11	1	NUMBERS	Square roots of numbers less than one and greater than 100	By the end of the lesson, the learner should be able to: a) Get the Square roots of numbers less than one and greater than 100 form their mathematical tables b) Enjoy finding square roots of numbers using tables	In pairs, learners are guided to: a) Define a squares and square roots b) Find squires of given numbers. c) Work out the squares of numbers from tables in different situations. d) Multiplication of squares. e) Memorizing squares of numbers f) Doing short test on squares of numbers g) Solving puzzles on squares.		Mathematical tables Multiplicatio n tables EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.49-50	Class activities Class written tests Extended activities Project observati ons	
12	2	NUMBERS	Revision	By the end of the lesson, the learner should be able to: a) Solve problems involving squares and square roots b) Enjoy finding squares and square roots of numbers using tables REVISION FOR ENDTERM	In pairs, learners are guided to: a) Define a squares and square roots. b) Find squires of given numbers. c) Work out the squares of numbers from tables in different situations. d) Multiplication of squares. e) Memorizing squares of numbers f) Doing short test on squares of numbers g) Solving puzzles on squares and square roots. Practice		Mathematical table Charts EAEP; SMART MINDS Mathematics Learner's Book Grade 8 pg.51-53	Class activities Class written tests Extended activities Project observati ons	

13	ENDTERM EXAMINATION
14	CLOSING OF THE SCHOOL