i.

i.

learning materials

In groups, learners are guided to draw and represent integers on number lines on

steps moved either forward or backward.

Others may include standing at a point, the zero point, and count the number of

For example climbing upstairs (positive), climbing down (negative).

Carry out activities involving positive and negative numbers and zero.

Learners to be involved in.

25 Minutes

**CONCEPT DEVELOPMENT**

Define number line



Define integers



5 Minutes

Solving problems involving integers and the number line

v.

Showing numbers on a number line

iv.

Reading numbers on a number line

iii.

Discussions about integers

ii.

Stairways

Number line

**LEARNING RESOURCES:**

When do we use integers in real life situation?

**KEY INQUIRY QUESTION(S):**

Have fun and enjoy generating integer’s numbers lines in their classroom.



Identify integers on a number line



Define integers



Natural numbers

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**INTEGERS**

**NUMBERS**

**STRAND:**

**LESSON: 1**

**WEEK: 2**

**WEEK 1: OPENING OF SCHOOL**

**TEACHER’S NAME** …………………….… **SCHOOL**………..**TERM** …… **YEAR** ….

**INTRODUCTION**

**CONTENT**

**GRADE 8 MATHEMATICS LESSON PLANS TERM 1**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

**LEARNING RESOURCES:**

When do we use integers in real life situation?

**KEY INQUIRY QUESTION(S):**

25 Minutes

Illustrating and solving problems involving four basic operations on integers

a)

Enjoy Performing the four basic operations on integers using the number line

**CONCEPT DEVELOPMENT**

Draw and represent integers on a number line

a)

5 Minutes

**INTRODUCTION**

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

and number line.

Teacher to observe learners understanding on operations involving integers

**Conclusion**

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

10 Minutes

**NUMBERS**

c)

Perform the four basic operations on integers using the number line

b)

Define a number line

a)

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Operations of integers**

**STRAND:**

**LESSON: 2**

**WEEK 2**

**............................................................................................................................. .......................**

**......................................................................................................................................................... ...**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving integers and number line.

Number line

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

**LEARNING RESOURCES:**

When do we use integers in real life situation?

**KEY INQUIRY QUESTION(S):**

Enjoy Performing the four basic operations on integers using the number line

f)

Perform the four basic operations on integers using the number line

e)

Define a number line

d)

By the end of the lesson, the learner should be able to:

**INTRODUCTION**

Draw and represent integers on a number line

b)

5 Minutes

**SPECIFIC OUTCOME:**

**CONTENT**

**Conclusion**

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

10 Minutes

Discussing exercises given by the teacher on integers

c)

integers

Teacher to observe learners understanding on operations involving integers

Explanations how to solve problems involving four basic operations on

b)

**SUB-STRAND:**

**Operations of integers**

**NUMBERS**

**STRAND:**

**LESSON: 3**

**WEEK 2**

**............................................................................................................................. .......................**

**............................................................................................................................. ...............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving integers and number line.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

and number line.

**SUB-STRAND:**

**NUMBERS**

**STRAND:**

**LESSON: 4-5**

**WEEK 2**

**Combined operations**

**..................................................................................................... ...............................................**

**.............................................................................................................................. ..............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving integers and number line.

c)

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

**LEARNING RESOURCES:**

operations applicable?

How do we carry out operations of integers? Where are integers

**KEY INQUIRY QUESTION(S):**

Enjoy Working out problems involving combined operations on integers in the correct order

Work out problems involving combined operations on integers in the correct order

b)

Define a number line

a)

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

Explanations how to solve problems involving four basic operations on

e)

Illustrating and solving problems involving four basic operations on integers

d)

integers

**CONCEPT DEVELOPMENT**

25 Minutes

**and Collaboration.**

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

and number line.

Teacher to observe learners understanding on operations involving integers

**Conclusion**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Discussing exercises given by the teacher on integers

f)

**............................................................................................................................. .......................**

**.............................................................................. ..............................................................................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving integers and number line.

**WEEK 3**

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

and number line.

Teacher to observe learners understanding on operations involving integers

10 Minutes

**Conclusion**

Natural numbers

Stairways

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy sharing equally the materials given.



Identify and write fractions in figures (proper and improper)





Define fractions

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Fractions, The meaning of fractions**

**NUMBERS**

**STRAND:**

**LESSON: 1**

**INTRODUCTION**

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8.*

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

Play creative games that involves number lines, for example jumping steps.

Solving problems involving combined operations on integers

b)

to perform operations on integers on correct order

a)

25 Minutes

**CONCEPT DEVELOPMENT**

Draw and represent integers on a number line

c)

5 Minutes

**............................................................................................................................. .......................**

**............................................................................................................................. ...............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving fractions.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**and Collaboration.**

a)

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy sharing equally the materials given.

c)

Identify and write equivalent fractions

b)

Define equivalent fractions

10 Minutes

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Equivalent fractions**

**NUMBERS**

**STRAND:**

**LESSON: 2**

**WEEK 3**

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

**Core competence: Critical Thinking, Problem Solving, communication**

Solving problems involving fractions



Discussions on the various types of fractions



*EAEP; SMART MINDS Mathematics*

**CONCEPT DEVELOPMENT**

25 Minutes

Make proper Definitions of fractions.

5 Minutes

**INTRODUCTION**

**Core competence: Critical Thinking, Problem Solving, communication**

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**and Collaboration.**

10 Minutes

Solving problems involving equivalent fractions





Weighing the items given

**WEEK 3**

Name fractions correctly



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Naming fractions**

**NUMBERS**

**STRAND:**

**LESSON: 3**



**............................................................................................................................. .......................**

**................................................................................................ ............................................................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving fractions.

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Measuring the items given



Dividing equally a given item like a piece of paper or sticks.



Discuss about the types of fractions

Stairways

**CONCEPT DEVELOPMENT**

25 Minutes

Make proper Definitions of fractions.

5 Minutes

**INTRODUCTION**

Doing excesses on fractions

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

10 Minutes

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**



Converting fractions





Solving problems involving fractions

**............................................................................................................................. .......................**

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Adding and subtracting fractions**

**NUMBERS**

**STRAND:**

**LESSON: 4**

**WEEK 3**



**............................................................................................................................. ...............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving fractions.

**Summary:**

Natural numbers

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Stairways

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy converting fractions



convert an improper fraction to a mixed number and vice versa



Sharing equally the items given

25 Minutes

**CONCEPT DEVELOPMENT**

Discussing about naming fractions

a)

5 Minutes

**INTRODUCTION**

**CONTENT**

**TIME**

**Core competence: Critical Thinking, Problem Solving, communication**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

10 Minutes

**and Collaboration.**

**Summary:**

Converting Fractions



Discussions about adding and subtracting fractions.



Show how to add and subtract fractions.

Outline types of fractions



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Multiplication and division of fractions**

**NUMBERS**

**STRAND:**

**LESSON: 5**

**WEEK 3**



**....................................................................................................................................................**

**............................................................................................................................. ...............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving addition and subtraction of fractions.

Stairways

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy adding and subtracting fractions

c)

Add and subtract fractions

b)

Name fractions correctly

a)

25 Minutes

**CONCEPT DEVELOPMENT**

Discussing about naming fractions

b)

5 Minutes

**INTRODUCTION**

**CONTENT**

**TIME**

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Showing the learner how to manipulate fractions



Learners to be given assignment to do at home. Written tests graded

Convert fraction



Divide fractions



Multiply fractions



**............................................................................................................................................................**

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Multiplication and division of fractions**

**NUMBERS**

**STRAND:**

**LESSON: 1-5**

**WEEK 4**

**............................................................................................................................. .......................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving multiplication and division of fractions.

**Summary:**

observation of group work activities ,Self and peer assessment

Natural numbers

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Stairways

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Appreciate the role of fractions in our da to da activities



Perform multiplication and division of fractions



Discuss about types of fractions and how they can be multiplied together.



25 Minutes

**CONCEPT DEVELOPMENT**

Discussing about naming and types of fractions.

c)

5 Minutes

**INTRODUCTION**

**CONTENT**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Showing the learner how to manipulate fractions



Convert fraction



Divide fractions



Multiply fractions



Discuss about types of fractions and how they can be multiplied together.



**....................................................................................................................................................**

**............................................................................................................................. ...............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving multiplication and division of fractions.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**LEARNING RESOURCES:**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Appreciate the role of fractions in our da to da activities



Perform multiplication and division of fractions



Outline types of fractions



25 Minutes

**CONCEPT DEVELOPMENT**

Discussing about naming and types of fractions.

d)

5 Minutes

**INTRODUCTION**

**CONTENT**

**TIME**

Convert of fractions



Divide fractions



Multiply fractions



Subtract fractions



Add fractions



25 Minutes

**CONCEPT DEVELOPMENT**

Discuss and use the correct order of operations in fractions

**....................................................................................................................................................**

**................................................................................................................................... .........................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving multiplication and division of fractions.

**Summary:**

5 Minutes

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Promote use of fractions in real life.



*Learner’s Book Grade 8 .*

Carry out combined operations on fractions on the correct order



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Order of operations**

**NUMBERS**

**STRAND:**

**LESSON: 1**

**CONTENT**

**INTRODUCTION**

**WEEK 5**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

Convert of fractions



Divide fractions



Multiply fractions



Subtract fractions



Add fractions



25 Minutes

**CONCEPT DEVELOPMENT**

Discuss and use the correct order of operations in fractions

5 Minutes

**Summary:**

**....................................................................................................... .............................................**

**................................................................................................................................ ............................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving multiplication and division of fractions.

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Carry out combined operations on fractions on the correct order

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Promote use of fractions in real life.





By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**Application of fractions in a real life situation**

**SUB-STRAND:**

**NUMBERS**

**STRAND:**

**LESSON: 2**

**INTRODUCTION**

**CONTENT**

**TIME**

**WEEK 5**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Divide fractions



Multiply fractions



Subtract fractions



Add fractions



25 Minutes

**CONCEPT DEVELOPMENT**

Discuss and use the correct order of operations in fractions

5 Minutes

**INTRODUCTION**

**Extended Activities**

In groups Learners to solve problems involving multiplication and division of fractions.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

Teacher to observe learners understanding on operations involving fractions.

**Conclusion**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Convert of fractions





Number line

**LEARNING RESOURCES:**

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Further exercises



Answer the questions in the student’s book.



Promote the use of fractions in real life situations

Stairways

Solve world problems involving fractions in real life situations



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Fractions, Revision**

**NUMBERS**

**STRAND:**

**LESSON: 3**

**CONTENT**

**TIME**

**WEEK 5**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Guiding learner to identify recurring decimals

Doing exercises on recurring decimals



Discussion on recurring decimals



25 Minutes

**CONCEPT DEVELOPMENT**





5 Minutes

**INTRODUCTION**

**Extended Activities**

decimals.

Teacher to observe learners understanding on operations involving recurring

**Conclusion**

10 Minutes

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

illustrations



Conversion

**Recurring decimals and fractions**

**KEY INQUIRY QUESTION(S):**

Convert recurring decimals into fractions



Identify recurring decimals



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

How do we use fractions in real life situations?

**NUMBERS**

**STRAND:**

**LESSON: 4**

**WEEK 5**

**.................................................... ................................................................................................**

**............................................................................................................................. ...............................**

**CONTENT**

**TIME**

**Reflection in the lesson/self-remarks:**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

**LEARNING RESOURCES:**

Indicate the recurring digits

a)

25 Minutes

**CONCEPT DEVELOPMENT**

Discuss and classify non-recurring and recurring decimals

a)

5 Minutes

**INTRODUCTION**

**CONTENT**

**Conclusion**

10 Minutes

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

**TIME**

Write decimals and whole numbers to given significant figures.

d)

places.

Discuss and round off decimal numbers t a required number of decimal

c)

Practice converting the recurring decimals to fractions

b)

**Summary:**

**............................................................................................................................. .......................**

**............................................................................................................................................................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving recurring decimals.

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**LEARNING RESOURCES:**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8 .*

Whole Numbers

*EAEP; SMART MINDS Mathematics*

Natural numbers

Stairways

Number line

How do we use fractions in real life situations?

**KEY INQUIRY QUESTION(S):**

Round off a decimal number to the required number of decimal places

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Rounding off decimals**

**NUMBERS**

**STRAND:**

**LESSON: 5**

**WEEK 5**

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

place value charts

**LEARNING RESOURCES:**

How do we use decimals in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy writing numbers in standard forms

Discussions about decimals

Demonstrations on how to operate decimals

b)



a)

5 Minutes

**INTRODUCTION**

**Extended Activities**

In groups Learners to solve problems involving recurring decimals.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Reflection in the lesson/self-remarks:**

decimals.

Teacher to observe learners understanding on operations involving recurring



Write numbers in standard form and apply in real life situations



Define standard form

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Standard form**

**NUMBERS**

**STRAND:**

**LESSON: 1-5**

**WEEK 8**

**WEEK 7: MIDTERM BREAK**

**WEEK 6: MIDTERM EXAMINATION**

**............................................................................................................................. .......................**

**............................................................................................................................................................**

**LEARNING RESOURCES:**

How do we use decimals in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy adding and subtracting decimals



Subtract decimals



Add decimals



place value charts

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Addition and subtraction of decimals**

**NUMBERS**

**STRAND:**

**LESSON: 1-2**

**WEEK 9**

**CONTENT**

**............................................................................................................................. .......................**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments



Doing exercises on decimals



Correcting errors caused by failure to manipulate decimal point correctly

Multiplying decimals



**CONCEPT DEVELOPMENT**

25 Minutes

observation of group work activities ,Self and peer assessment

**............................................................................................................................................................**

**Reflection in the lesson/self-remarks:**

In groups Learners to solve problems involving recurring decimals.

**Summary:**

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

decimals.

Teacher to observe learners understanding on operations involving recurring

**Conclusion**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

**............................................................................................................................. .......................**

**............................................................................................................................................................**

**Reflection in the lesson/self-remarks:**

In groups Learners to demonstrate how to operate decimals.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

decimals.

Teacher to observe learners understanding on operations involving recurring

**Conclusion**

**and Collaboration.**

Multiply decimals

place value charts

**LEARNING RESOURCES:**

How do we use decimals in real life situations?

**KEY INQUIRY QUESTION(S):**

Play games of operations of decimals using it or other materials



Divide decimals



**Core competence: Critical Thinking, Problem Solving, communication**



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Multiplication and division**

**NUMBERS**

**STRAND:**

**LESSON: 3**

**WEEK 9**

25 Minutes

**CONCEPT DEVELOPMENT**

Demonstrations on how to operate decimals

d)

Discussions about decimals

c)

5 Minutes

**INTRODUCTION**

10 Minutes



Doing exercises on decimals.



Correcting errors caused by failure to manipulate decimal point correctly

Multiplying decimals



Demonstrations on how to operate decimals



Discussions about decimals



observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

decimals.

Teacher to observe learners understanding on operations involving recurring

**Conclusion**

**and Collaboration.**

10 Minutes

**Core competence: Critical Thinking, Problem Solving, communication**

Doing exercises on decimals





Correcting errors caused by failure to manipulate decimal point correctly

Multiplying decimals



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Combined operation on decimals**

**NUMBERS**

**STRAND:**

**LESSON: 4**

**WEEK 9**

**............................................................................................................................. .......................**

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**Reflection in the lesson/self-remarks:**

In groups Learners to demonstrate how to operate decimals.

**Summary:**

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Demonstrations on how to operate decimals



Discussions about decimals



25 Minutes

**CONCEPT DEVELOPMENT**

Measuring instruments

Demonstrations on how to operate decimals

f)

Discussions about decimals

e)

5 Minutes

**INTRODUCTION**

10 Minutes

Playing games involving decimals using devices





Solving puzzles in decimals



Subtracting decimals

**Core competence: Critical Thinking, Problem Solving, communication**



Dividing decimals

Multiplying decimals



Adding decimals



**............................................................................................................................. .......................**

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**Reflection in the lesson/self-remarks:**

In groups Learners to demonstrate how to operate decimals.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

decimals.

Teacher to observe learners understanding on operations involving recurring

**Conclusion**

**and Collaboration.**

place value charts

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

**LEARNING RESOURCES:**

How do we use decimals in real life situations?

**KEY INQUIRY QUESTION(S):**

Play games of operations of decimals using it or other materials



Apply the knowledge of decimals to real life situations



Carry out operations in the correct order



25 Minutes

**CONCEPT DEVELOPMENT**

Application of decimals to real life situations



Discussions on operations of decimals.



5 Minutes

**INTRODUCTION**

**CONTENT**

Memorizing squares of numbers



Multiplication of squares.



Work out the squares of numbers from tables in different situations.





Find squires of given numbers.



25 Minutes

**CONCEPT DEVELOPMENT**

Find squires of given numbers.



**Extended Activities**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

Define squares.

Teacher to observe learners understanding on operations involving squares.

**Conclusion**

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

10 Minutes

Solving puzzles on squares.



Doing short test on squares of numbers

b)

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

place value charts

**LEARNING RESOURCES:**

How do we use decimals in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy using squires of numbers

c)

Find squares of numbers by multiplication and factorization

Define the term square

a)

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Squares of numbers**

**NUMBERS**

**STRAND:**

**LESSON: 5**



5 Minutes

**INTRODUCTION**

**WEEK 9**

**CONTENT**

**TIME**

Memorizing squares of numbers

c)

Multiplication of squares.

b)

Work out the squares of numbers from tables in different situations.

a)

d)

25 Minutes

**CONCEPT DEVELOPMENT**

Find squires of given numbers.



Define squares.



5 Minutes

Emphasizing standard form

Playing games on squares of numbers

Doing short tests on squares

h)

10 Minutes

**INTRODUCTION**

g)

Reading the mathematical table

f)

Solving puzzles on squares.

e)

Doing short test on squares of numbers

**SPECIFIC OUTCOME:**

Where do we apply squares and square roots in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy finding the squares of numbers.



find the squares of numbers from the mathematical table



read the mathematical table



By the end of the lesson, the learner should be able to:

**LEARNING RESOURCES:**

**SUB-STRAND:**

**Squares of numbers greater than 1 and less than 10**

**NUMBERS**

**STRAND:**

**LESSON: 1**

**WEEK 10**

**............................................................................................................................. .......................**

**............................................................................................................................................................**

**CONTENT**

**TIME**

**Reflection in the lesson/self-remarks:**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

place value charts

**CONTENT**

**INTRODUCTION**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

place value charts

**LEARNING RESOURCES:**

Work out the squares of numbers from tables in different situations.

Memorizing squares of numbers



25 Minutes

**CONCEPT DEVELOPMENT**

Where do we apply squares and square roots in real life situations?

c)

Find squires of given numbers.

b)

Define a square

a)

5 Minutes

**Conclusion**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving squares.

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

**SUB-STRAND:**

**KEY INQUIRY QUESTION(S):**

Enjoy finding the squares of numbers.



Find the square of numbers greater than 10 from the mathematical table.



Read mathematical tables



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**Squares of numbers greater than 10**

**NUMBERS**

**STRAND:**

**LESSON: 2**

**WEEK 10**

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**Reflection in the lesson/self-remarks:**

Objects

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Measuring instruments

place value charts

**LEARNING RESOURCES:**

Where do we apply squares and square roots in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy finding the squares of numbers.



Find the square of numbers greater than 10 from the mathematical table.



Read mathematical tables

d)

Work out the squares of numbers from tables in different situations.

f)

Find squires of given numbers.

e)

Define a square



5 Minutes

**INTRODUCTION**

Teacher to observe learners understanding on operations involving squares.

**Conclusion**

10 Minutes

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

Solving puzzles on squares.



**Extended Activities**

Doing short test on squares of numbers



**............................................................................................................................................................**

By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Squares of numbers less than 1**

**NUMBERS**

**STRAND:**

**LESSON: 3**

**WEEK 10**

**............................................................................................................................. .......................**

**Reflection in the lesson/self-remarks:**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

place value charts

**LEARNING RESOURCES:**

Where do we apply squares and square roots in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy finding the squares of numbers.



Find the square of numbers greater than 10 from the mathematical table.



Read mathematical tables



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Finding square roots by factorization.**

**NUMBERS**

**STRAND:**

**INTRODUCTION**

**LESSON: 4**

**CONTENT**

**TIME**

**Core competence: Critical Thinking, Problem Solving, communication**

Solving puzzles on squares.



Doing short test on squares of numbers



Memorizing squares of numbers



25 Minutes

**CONCEPT DEVELOPMENT**

**WEEK 10**

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**Reflection in the lesson/self-remarks:**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving squares.

10 Minutes

**Conclusion**

**and Collaboration.**

**STRAND:**

**LESSON: 5**

**WEEK 10**

**............................................................................................................................. .......................**

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**Reflection in the lesson/self-remarks:**

**NUMBERS**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Objects

Measuring instruments

place value charts

**LEARNING RESOURCES:**

Where do we apply squares and square roots in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy finding the squares of numbers.



**Extended Activities**

Find the square of numbers greater than 10 from the mathematical table.



Read mathematical tables



By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Square root tables**

25 Minutes

**CONCEPT DEVELOPMENT**

Work out the squares of numbers from tables in different situations.

i)

Find squires of given numbers.

h)

Define a square

g)

5 Minutes



Teacher to observe learners understanding on operations involving squares.

**Conclusion**

10 Minutes

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

Solving puzzles on squares.

Doing short test on squares of numbers



Memorizing squares of numbers



**............................................................................................................................. .......................**

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**Reflection in the lesson/self-remarks:**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving squares.

**Conclusion**

10 Minutes

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

Read mathematical tables

Measuring instruments

place value charts

**LEARNING RESOURCES:**

Where do we apply squares and square roots in real life situations?

**KEY INQUIRY QUESTION(S):**

Enjoy finding the squares of numbers.



Find the square of numbers greater than 10 from the mathematical table.





By the end of the lesson, the learner should be able to:

**SPECIFIC OUTCOME:**

**SUB-STRAND:**

**Square roots of numbers less than one and greater than 100**

**NUMBERS**

**STRAND:**

**LESSON: 1-5**

**WEEK 11**

5 Minutes

**INTRODUCTION**

j)

**CONTENT**

**TIME**

Solving puzzles on squares.



Doing short test on squares of numbers



Memorizing squares of numbers



**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

25 Minutes

**CONCEPT DEVELOPMENT**

Work out the squares of numbers from tables in different situations.

l)

Find squires of given numbers.

k)

Define a square

**and Collaboration.**

**Core competence: Critical Thinking, Problem Solving, communication**

Solving puzzles on squares.



10 Minutes

Doing short test on squares of numbers



Memorizing squares of numbers



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**Reflection in the lesson/self-remarks:**

In groups Learners to do operations involving squares of various numbers.

**Summary:**

observation of group work activities ,Self and peer assessment

Learners to be given assignment to do at home. Written tests graded

**Extended Activities**

Teacher to observe learners understanding on operations involving squares.

**Conclusion**

**CONTENT**

**TIME**

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

*Learner’s Book Grade 8*

*EAEP; SMART MINDS Mathematics*

Define a square

25 Minutes

**CONCEPT DEVELOPMENT**

Work out the squares of numbers from tables in different situations.

o)

Find squires of given numbers.

n)

Objects

m)

5 Minutes

**INTRODUCTION**