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Skillment

MATHEMATICS

A Multi-skill Activity Book on Mathematics

FS-5
Class - 2

LESSON PLAN

CONTENT PAGE

LESSON PLAN – FS-5 (Class 2)

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 1: Numbers up to 200	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners capable of learning the numbers up to 200
2. To make the learners understand the concept of hundreds, tens and ones place using different mathematical tools
3. To make the learners understand the concept of place value and face value of the numbers
4. To make the learners understand the concept of expanded form and short form of numbers
5. To make the learners understand about the concept of cardinal numbers and ordinal numbers

Specific Objectives:

1. To make the learners count, write and arrange the numbers up to 200
2. To make the learners understand the concept of hundreds, tens and ones place
3. To make the learners differentiate between place value and face value of the numbers

4. To make the learners understand the concept of expanded form and short form of numbers

5. To make the learners understand about the cardinal numbers and ordinal numbers

Learning Outcomes:

1. Learners begin to count, write, arrange, and compare the numbers up to 200.
2. Learners begin to understand the concept of hundreds, tens and ones place.
3. Learners begin to differentiate between place value and face value.
4. Learners begin to understand about the concept of expanded form and short form of numbers.
5. Learners begin to understand the concept of cardinal numbers and ordinal numbers.

Stage 2- Learning Plan

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

To explore different ways in which the learners can explore the various ways to understand, compare and order the numbers up to 200

Teaching Aids:

1. Stationery/TL Aids: abacus, toothpicks, rubber bands, and pencil
2. Printed Material/Books: Skillment Mathematics FS-5
3. Worksheets/Workbook: Workbook
4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Recap Numbers up to 99

Aim: To make learners count, write, arrange, and compare the numbers up to 99

Strategy: The teacher to:

- Divide the students in pairs.
- Write the Ten's place and One's place value on the board.
- Say any number between 0 to 99.
- Call out a student towards the board and ask him/her to write that number under the correct place value.
- Also, call another student and ask him/her to write the number name for the same number written by the first student.

- Continue this activity with atleast 10 random numbers between 0 to 99.
- Make the students read and write the numbers and number names from 0 to 99.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills, Physical and Motor skills

Session/Period 2 (Topic): Hundred's Place

Aim: To make the learners understand the concept of hundreds, tens and ones place

Strategy: The teacher to:

- Show 9 bundles of toothpicks (10 in each bundle) and 9 loose toothpicks to demonstrate 99.
- Instruct that 99 is the biggest 2 digit number.
- Add 1 loose toothpick and then make a bundle.
- Introduce that if we have 10 bundles (10 toothpicks in each bundle), it will become a three digit number, i.e. 100.
- Explain the concept of hundreds, tens and ones using the abacus.
- Write 'Hundreds' 'Tens' and 'Ones' on a paper (in an activity).
- Help the students understand how 99 becomes 100 when 1 is added to it.
- Show them by adding more toothpicks and form random numbers between 100 to 200 for better understanding.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills, Physical and Motor skills

Session/Period 3 (Topic): Place Value and Face Value

Aim: To make the learners differentiate between place value and face value of the numbers

Strategy: The teacher to:

- Revise with students the hundreds, tens and ones place value.
- Demonstrate by taking 5 bundles of toothpicks (10 in each) and 3 loose toothpicks.
- Ask the students how many bundles there are and the response will be 5.
- Explain them that 5 will be their place value.
- Ask them, "How many toothpicks will be there in those 5 bundles?" Response will be 50.
- Explain them the concept of face value.
- Explain the ones place in similar manner.
- Demonstrate this activity with some more examples with numbers upto 200.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills, Physical and Motor skills

Session/Period 4 (Topic): Expanded Form and Short Form of Numbers

Aim: To make the learners explain about expanded form and short form of numbers

Maths FS-5 Lesson Plan

Strategy: The teacher to:

- Revise with students the hundreds, tens and ones place value by writing them on the board and asking about the values.
- Write a two-digit number on the board with tens and ones column.
- Ask the students to say the number loudly below tens column.
- Explain them that for expanded form, we write the number and the column name from big place value to small.
- Write the expanded form of that number (E.g.: 34 – 3 tens and 4 ones).
- Explain this vise versa about short form.
- Instruct the students that they should write the numbers under the columns as per the expanded form (E.g.: – 5 tens and 1 ones = 51)
- Make the students explain this with few examples.
- Call some students on the board and make them solve some examples too.

Session/Period 5 (Topic): Cardinal Numbers and Ordinal Numbers

Aim: To make the learners understand about the cardinal numbers and ordinal numbers

Strategy: The teacher to:

- Take the students to an outdoor place.
- Make a queue of 10 students and ask them to race.
- Ask the remaining students to write the winning places of the students.
- Start the race.
- Ask the participant students to say the order of winning after the race gets over.
- Take them back to the classroom.
- Explain them that for the student who stood at the first position, it is written as 1st (E.g.: Abhay- 1st, Divya- 2nd and so on).
- Write the cardinal numbers from 1st to 10th on the board and write the name of the students according to the race.
- Make the students understand it by conducting the race with 3 to 4 groups.

Activities /Project /Integration/Research Work:

1. Integration:

   Art Integration:

   The teacher to encourage the students to do pages 20 and 21 of the main book.

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 8, 11, 12 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do pages 13, 15, 16 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do pages 17, 18, 19 of the main book.

Note:– Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

The teacher to ask the learners to do pages 5, 6, 7 and 8 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to say the numbers of 0 to 200 out loud in the class.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 2: Addition	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the method and importance of addition of three two-digit numbers
2. To make the learners understand the method and importance of addition with carry over

Specific Objectives:

1. To make learners solve addition of two 2-digit numbers with the help of number line
2. To make learners solve addition of two 2-digit numbers without carry over
3. To make learners solve addition by regrouping of ones
4. To make learners solve addition of two and three 2-digit numbers with carry over

Learning Outcomes:

1. Learners begin to solve addition of two 2-digit numbers with the help of number line, addition of two 2-digit numbers, as well as the word problems.
2. Learners begin to solve addition of two and three 2-digit numbers (with and without the help of carry over).

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can do addition in a fun way

2. To explore activities to explain the concept of addition two-digit numbers

Teaching Aids:

1. Stationery/TL Aids: beads, pencils, rubber band, abacus

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Recap of Addition with Number Line

Aim: To make learners solve addition of two 2-digit numbers with the help of number line

Strategy: The teacher to:

- Revise the concepts of tens and ones.

- Play a game with the students by drawing a number line on the board and writing numbers up to 20.

- Write a sum above the number line (e.g.: 10+5, 13+2, so on).

- Ask the students to copy the question in the notebook.

- Call out one student towards the board.

- Instruct all the students that of a count on 3,2,1, everyone will start solving the sum together.

- Ask the student near the board to solve it before other students in the class.

- Repeat the steps with other students until 5 to 6 students have been called towards the board to solve.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Addition of Two 2-digit Numbers Without Carry Over

Aim: To make learners solve addition of two 2 digit number without carry over

Strategy: The teacher to:

- Teach the students how to solve addition when 2-digit numbers are big.

- Take a pack of beads (in an activity).

- Now make 3 groups of beads (10 each) and 7 loose beads.
- Similarly make 2 groups of beads (10 each) and 5 loose beads.
- Make the columns of tens and ones on the board.
- Ask the students to tell the number of bundles in the first row (3).
- Similarly ask the students about the tens and ones in both the rows.
- Show them how to solve the addition when they are written vertically.
- Continue the activity with 4 to 5 examples or until the concept is clear.
- Tell the students about some facts of the addition.
    - When 0 is added to a number, the number itself is the answer.
    - When 1 is added to a number, we get the next number.
- Solve some problem sums by giving real-life examples using students' names.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Regrouping of Ones

Aim: To make learners solve addition by regrouping of ones

Strategy: The teacher to:

- Take a recap of the previous session.
- Take pencils from the pencil boxes (for an activity).
- Make 2 bundles of pencils (10 each) and 13 loose pencils.
- Make the column of tens and ones on the board.
- Ask the students to say the number which comes under the tens column by counting the bundles.
- Now, ask the students to say the number that will come under ones column.
- Ask the students if we can write 2-digit number under ones column.
- Tell the students that now we have to regroup these numbers.
- Remind the students that when we have 10 pencils at ones place, we make a bundle of it and shift it to the tens place.
- Make a bundle of pencils and now ask the students to count the bundles and loose pencils.
  Answer will be 3 bundles and 3 loose pencils.
- Continue the activity with more examples until the students understand the concept.
- Call some students near the board and ask them to solve for better understanding.
- Explain this concept with the use abacus also.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Addition of Two and Three 2-digit Numbers with Carry Over

Aim: To make learners solve addition of two and three 2-digit numbers with carry over

Strategy: The teacher to:

- Recap the concept of two 2-digit numbers without carry over.

- Make 2 columns of tens and ones.

- Write the number under it (35+27), under respective columns.

- Instruct the students that addition always starts from ones column.

- Ask the students what the sum will be if we add 5 and 7 (12).

- The response will be we make a bundle of 10 and give it to tens column and the remaining number will come under ones column.

- Similarly show the students that when we add 2-digit numbers vertically, we make a carry over above tens column.

- Now, explain them which number to be written above the tens column.

- Continue to explain this until the concept is clear with two 2-digit numbers.

- Explain them that similarly we add them with three 2-digit numbers.

- Solve some problems sums by giving real-life examples of using students' names.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. Integration:

   Drama:

   Make the students perform a play on addition by becoming the numbers and tens and ones columns and ask them to solve and then arrange themselves by placing them under the tens and ones columns. Conduct this activity with carry over for better understanding. (For this, ask the students to take the flashcards and stand.)

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 24, 25, 26, 27, 28, and 29 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 30 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do page 31 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

1. The teacher to ask the learners to do page 23 of the main book as their homework.

2. The teacher to ask the learners to do pages 9, 10, and 11 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to solve some addition sums on the board.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 3: Subtraction	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the method and importance of subtraction of two 2-digit numbers
2. To make the learners understand the method and importance of subtraction with borrowing

Specific Objectives:

1. To make learners solve subtraction of two 2-digit numbers with the help of number line
2. To make learners solve subtraction of two 2-digit numbers without borrowing
3. To make learners solve subtraction of two and three 2 digit numbers with regrouping
4. To make learners check subtraction using addition strategy

Learning Outcomes:

1. Learners begin to solve subtraction of two 2-digit numbers with the help of number line, subtraction of two 2-digit numbers, as well as the word problems.
2. Learners begin to solve subtraction of two and three 2-digit numbers (with and without borrowing).

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve subtraction in a fun way

2. To explore activities to explain the concept of subtraction two-digit numbers

Teaching Aids:

1. Stationery/TL Aids: ice-cream sticks, rubber band, abacus.

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1 (Topic): Recap of Subtraction with Number Line

Aim: To make learners solve subtraction of two 2-digit number with the help of number line

Strategy: The teacher to:

- Revise the concepts of tens and ones.
- Play a game with the students by drawing a number line on the board and writing numbers up to 20.
- Write a sum above the number line (e.g.: 10-5, 13-2, so on).
- Ask the students to copy the question in the notebook.
- Call out one student towards the board.
- Instruct all the students that on a count on 3, 2, 1 everyone will start solving the sum together.
- Ask the student near the board to solve it before other students in the class.
- Repeat the steps with other students until 5 to 6 students have been called towards the board to solve.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Subtraction of Two 2-digit Numbers without Borrowing

Aim: To make learners solve subtraction of two 2-digit numbers without borrowing

Strategy: The teacher to:

- Teach the students how to solve subtraction when 2-digit numbers are big.
- Take some ice-cream sticks (for an activity).
- Make 4 groups of sticks (10 each) and 7 loose sticks.

- Similarly make 2 groups of sticks (10 each) and 5 loose sticks.
- Make the columns of tens and ones on the board.
- Ask the students to tell the number of bundles in the first row (4).
- Similarly ask the students about the tens and ones in both the rows.
- Show them how to solve the subtraction when they are written vertically with the help of sticks.
- Instruct them that there are 7 loose sticks and if we remove 5, we get the answer of ones column.
- Similarly, tell the students to solve the tens column by removing the bundles.
- Instruct the students that in subtraction we remove the objects.
- Continue the activity with 4 to 5 examples or until the concept is clear.
- Teach the students some facts of the subtraction, e.g.:
  When 1 is subtracted to a number, we get the previous number.
- Solve some problem sums by giving real-life examples of using students' names.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Subtraction of Two 2-digit Numbers with Borrowing

Aim: To make learners solve subtraction of two and three 2 digit numbers with regrouping

Strategy: The teacher to:

- Make 2 columns of tens and ones.
- Write the numbers (27 and 19) under respective columns.
- Instruct the students that subtraction always starts from ones column.
- Ask the students what the answer will be when we subtract 7 from 9.
- Instruct the students that we cannot subtract smaller number with a big number.
- Explain this with an example, "What if a student has 7 pencils and is asked to give 9? Is it possible?"
- Instruct that if we have less things, then we borrow from another one that has more than us.
- Explain to the students that in this case, we will borrow from the next number, i.e. from 2.
- We will cut 2 and write 1 because when we take a digit from tens place, the number reduces.
- Now ask the students if we can subtract 9 from 17.
- Solve the remaining sum and explain to the students.
- Continue to explain this until the concept is clear with two 2-digit numbers.
- Solve some problem sums by giving real-life examples using students' names.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Checking Subtraction using Addition

Aim: To make learners check subtraction using addition strategy

Strategy: The teacher to:

- Make 2 columns of tens and ones.
- Recap the concept that was taught in the previous sessions.
- Write a question for subtraction on the board under respective columns.
- Call the students one by one towards the board and ask them to solve the questions.
- Now show them how to check that the answer is correct or not by addition.
- Instruct the students that when they have to check their answer through addition, they have to write the answer of subtraction in the first column and subtract (the smaller number from the subtraction question).

    If they get the answer same as the bigger number, then their subtraction is correct.

Activities /Project /Integration/Research Work:

1. Integration:

    Drama:

    Make the students perform a play on subtraction by becoming the numbers and tens and ones columns and ask them to solve by placing themselves under the tens and ones columns. Conduct this activity with borrowing for better understanding. (For this, ask the students to take the flash cards and stand).

2. (Pls specify about project work / research work and details as per the activities)

    Nil

    (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 34, 35, 36, 37, 38, and 39 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 40 and 41 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do pages 40 and 41 of the main book.

Note:– Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

1. The teacher to ask the learners to do page 33 of the main book as their homework.
2. The teacher to ask the learners to do pages 12, 13, and 14 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to solve some subtraction sums on the board.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 4: Multiplication	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the concept of repeated addition as a base of multiplication
2. To make the learners understand the concept of tables of 6, 7, 8, 9, 10
3. To make learners understand vertical multiplication and multiple facts
4. To make learners understand the concept of multiplication on a number line
5. To make learners understand multiplication of 2-digit number by a 1-digit number with and without carry over

Specific Objectives:

1. To make the learners solve repeated addition as a base of multiplication
2. To make the learners solve the tables of 6, 7, 8, 9, 10
3. To make the learners solve the vertical multiplication and understand about multiple facts and order of numbers
4. To make the learners solve the multiplication on number line
5. To make the learners solve the multiplication of 2-digit number by a 1-digit number with and without carry over

Learning Outcomes:

1. Learners begin to solve repeated addition as a base of multiplication.
2. Learners begin to learn the tables of 6, 7, 8, 9, 10.
3. Learners begin to solve the vertical multiplication and understand about multiple facts.
4. Learners begin to solve the multiplication on number line.
5. Learners begin to solve the multiplication of 2-digit numbers by a 1-digit number with and without carry over.

Stage 2- Learning Plan

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve multiplication in a fun way
2. To explore activities to explain the concept of multiplication on a number line

Teaching Aids:

1. Stationery/TL Aids: a pack of toothpicks, rubber band, abacus
2. Printed Material/Books: Skillment Mathematics FS-5
3. Worksheets/Workbook: Workbook
4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Repeated Addition as a Base of Multiplication

Aim: To make the learners solve repeated addition as a base of multiplication

Strategy: The teacher to:

- Revise the concept of multiplication.
- Ask the students to read out the tables from 1 to 5 for revision.
- Take a pack of toothpicks (for an activity).
- Make 5 groups of 3 toothpicks each and place them at a distance from each other.
- Explain the students that multiplication is about adding the same things in a group again and again.
- Call one student and ask him/her to count the number of toothpicks kept on the table.
- Explain them when they say 3*5 that means that there are 5 groups of 3 toothpicks and the product of that will be 15.

- Explain to the students that multiplication is used to avoid repeated addition.
- Tables are used so that the time is saved of repeated addition.
- Explain this concept with the help of some examples.
- Solve some examples with the help of abacus.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Solving the Tables of 6, 7, 8, 9, 10.

Aim: To make the learners solve the tables of 6, 7, 8, 9, 10

Strategy: The teacher to:

- Start the session by taking a recap of repeated addition.
- Explain the students that with the help of same example (toothpicks), they can learn the tables of 6 to 10.
- Start demonstrating the table by making groups of 6.
- Increase the groups gradually.
- Call different students every time to count the number of toothpicks.

  As the students call out the right answers, write on the board the format of the table.
- Continue this activity for tables 6 to 10.
- Ask the students to read together the tables one by one.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Vertical Multiplication, Multiple Facts, and Order of Numbers

Aim: To make the learners solve the vertical multiplication and understand about multiple facts and order of numbers

Strategy: The teacher to:

- Ask the students to speak out the tables from 2 to 10 loudly.
- Guide the students that numbers are infinite and we can multiply 5-digit, 6-digit numbers but we cannot remember tables.

  So for that it is necessary to know the tables up to 10.
- Instruct the students that they will learn vertical multiplication but initially with 1-digit numbers.
- Write a multiplication sum on the board.
- Explain the students that they can multiply in this manner also.
- Ask any one student to give the product of the sum.
- Explain the concept with some examples.

- Guide the students about the multiplication facts i.e.
  - ➢ Any number multiplied by 1 is the number itself.
  - ➢ Any number multiplied by 0 is 0.
- Explain the students that if any 2 numbers are multiplied in any order, the product remains the same.

  For example, 5*4=4*5=20.
- Explain the students with some examples and ask them to solve some questions by calling them towards the board.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Multiplication on a Number Line

Aim: To make the learners solve the multiplication on number line

Strategy: The teacher to:
- Draw a number line on board and write the numbers from 0 to 20.
- Write 3*5 on the board as a question.
- Now start from zero.
- Count the numbers with skip counting of 3.
- Skip 5 times 3 numbers and ask the students to guess the next number.

  The numbers that will be marked on the number line are 3, 6, 9, 12, 15.
- Instruct the students that after skipping for 5 times three numbers, we get our product.
- Explain the students this concept with some more examples.
- Write and draw two questions on the board and call two students towards it.
- Ask them to start on a count of 3, 2, 1.
- Instruct them that whoever will complete sooner will be the winner.
- Continue this game for 3 to 4 rounds.

Session/Period 5 (Topic): Multiplication of 2-digit Numbers by a 1-digit Number with and without Carry Over

Aim: To make the learners solve the multiplication of 2-digit number by a 1-digit number with and without carry over

Strategy: The teacher to:
- Recap the method of vertical multiplication with 1-digit number.
- Instruct the students that they will learn how to multiply with 2-digit numbers vertically.
- Make two columns of tens and ones on the board.

- Write 34 under respective column.
- Under that write 2 under ones column.
- Guide the students that it is a rule that we start solving any question in maths from ones column.
- Now, instruct the students that the number in the second column will be multiplied with both the numbers in the first column.
- Start solving and multiply 4 with 2. The product will be 8.
- Now, show the students to multiply 2 with 3 and the product will by 6.
- The answer of this question is 68.
- Explain the concept with some more examples.
- Also, solve some questions with carry over.
- Explain that the way we make the carry over in addition above tens column, we make it in the same manner here also.
- Guide them that the carry over will be added to the product after multiplication.

Activities /Project /Integration/Research Work:

1. Integration:

   NIL

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 47, 48, 50, 51, 52, 53, 54, 55 and 56 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 43 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do page 57 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

The teacher to ask the learners to do pages 15, 16, and 17 of the workbook as their homework.

Assessment Means:

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests

2. Number of learners and facilitators/teachers in a class

3. Creative teaching learning methods

4. List of vocabulary for reading and writing for practice for learners

5. Assessment schedule of the school

6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 5: Division	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the concept of division by equal distribution
2. To make the learners understand the concept of division as repeated subtraction
3. To make learners understand division as repeated subtraction on number line
4. To make learners understand long division method

Specific Objectives:

1. To make the learners solve division by equal distribution
2. To make the learners solve the division as repeated subtraction
3. To make the learners solve the division as repeated subtraction on number line
4. To make the learners solve the division by long division method

Learning Outcomes:

1. Learners begin to solve division by equal distribution.
2. Learners begin to solve the division as repeated subtraction.
3. Learners begin to solve the division as repeated subtraction on number line.
4. Learners begin to solve the division by long division method.

Stage 2- Learning Plan

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve division in a fun way
2. To explore activities to explain the concept of division by long division method

Teaching Aids:

1. Stationery/TL Aids: pack of pencils, abacus.
2. Printed Material/Books: Skillment Mathematics FS-5
3. Worksheets/Workbook: Workbook
4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Division by Equal Distribution

Aim: To make the learners solve division by equal distribution

Strategy: The teacher to:

- Explain the students that if we want to give something in equal numbers then we use the method of division.
- The symbol of division is ÷.
- Explain this with an example using 10 pencils (for an activity).
- Call 5 students in front and hold 10 pencils in hand.
- Ask the students, "If I want to distribute these pencils equally among the students, how many each student will get?"
- Start demonstrating by distributing 1 pencil to each student.
- Now, ask the students, "Still 5 are left and if I distribute these 5 to each student, the number of pencils each student will have is 2."

- Ask the students, "Does every student has equal number of pencils?"
- Demonstrate the same activity with different numbers and examples.
- Write an example on the board symbolically, i.e. 10 ÷ 5 = 2.
- Explain the students that the number to be divided is called dividend.

    The number by which we divide is called divisor.

    The answer we get after division is called quotient.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Division as Repeated Subtraction

Aim: To make the learners solve the division as repeated subtraction

Strategy: The teacher to:

- Recap the concept of division from the previous session.
- Instruct the students that division is nothing but simply doing subtraction of the same number.
- Ask the students to remember the method of multiplication – it was repeated addition and division is repeated subtraction.
- Demonstrate this with the help of pencils (for an activity).
- Keep 9 pencils in hand and call 3 students in front.
- Distribute the pencils equally and while doing so say that you are giving 3 pencils to x student, 3 pencils to y student and 3 pencils to z student.
- Guide them that equal number of pencils are distributed by subtracting the same number, i.e. 3.
- Demonstrate the concept on the board.
- Draw the balls on the board and explain the students the concept by subtracting repeatedly.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Division as Repeated Subtraction on Number Line

Aim: To make the learners solve the division as repeated subtraction on number line

Strategy: The teacher to:

- Start the session by drawing the number line on the board.
- Write numbers from 0 to 20 on the number line. Also, write a division question, i.e. 15 ÷ 3.
- Instruct the students that whatever the dividend is, we have to start from that number on a number line.
- Guide the students that as it is subtraction, we have to do skip counting backwards.

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- Start by demonstrating the question given.
- Start skipping 3 number and mark whichever number comes after skipping.
  The numbers will be 15, 12, 9, 6, and 3.
- Explain to the students that we have to continue the skip counting until we reach number 1.
- Count how many numbers are marked on the number line. There are 5 numbers marked.
- So, explain the students that the quotient is 5 or explain this by giving an example:
  If there are 15 pencils and each student should get 3, then distribution will take place among 5 students.
- Explain this with different examples and by including students as well.
- Guide some division facts that division by 1 means no sharing.
  Anything divided by 0 is 0.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Division by Long Division Method

Aim: To make the learners solve the division by long division method

Strategy: The teacher to:
- Start the session by asking the position of divisor, dividend and quotient.
- Write the proper format of division on the board.
- Instead of numbers, write the terminologies on the board in its place.
- Now draw another format of division and fill it by writing the question at its respective place.
- Write the question, i.e. 12 ÷ 2.
- Explain the students that here also we will make use of tables.
- The number at divisor place is over table of which we will think. Here the number at divisor place is 2, so we will start the table of 2.
- Now, instruct the students that we have to stop the table when we get our dividend in it. 2 x 6 = 12.
  We have to write the 6 at the place of quotient and subtract 12 with 12.
  If you get the answer 0 for the subtraction, then you have divided correctly.
  It is not compulsory to get the answer 0 in every division sum but that method will be taught in higher grades.
- Give some more examples and for better understanding, ask the students to solve as well.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**
   NIL

2. **(Pls specify about project work / research work and details as per the activities)**
   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do page 64, 65, 67, 68, and 69 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 62 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do page 70 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

The teacher to ask the learners to do page 18 and 19 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to solve some division sums on the board.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 6: Numbers up to 1000	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the concept of numbers in hundreds
2. To make learners understand about reading and writing 3-digit numbers and before, after and between numbers
3. To make learners understand the concept of place value and face value, expanded and short form of numbers
4. To make learners understand comparing of numbers and formation of the largest and smallest numbers

Specific Objectives:

1. To make the learners solve numbers in hundreds
2. To make the learners solve reading and writing 3-digit numbers and before, after and between numbers
3. To make the learners solve place value and face value, expanded and short form for numbers
4. To make the learners solve comparing of numbers and formation of the largest and smallest numbers

1. Learners begin to solve numbers in hundreds.

2. Learners begin to do reading and writing 3-digit numbers and understand before, after and between numbers.

3. Learners begin to understand place value and face value, expanded and short form of numbers.

4. Learners begin to do comparing of numbers and understand the formation of the largest and smallest numbers.

Stage 2- Learning Plan

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve numbers up to 1000 in a fun way

2. To explore activities to explain the concept of formation of the largest and smallest numbers

Teaching Aids:

1. Stationery/TL Aids: cutouts of H, T, and O; flashcards of numbers 0-9, abacus

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Numbers in Hundreds

Aim: To make the learners solve numbers in hundreds

Strategy: The teacher to:

• Revise the number up to 200 that they learnt in chapter 1.

• Explain the students the place value of hundreds, tens and ones with the help of abacus.

• Explain the students that we cannot count if there are more number of things present, so we use grouping method into the place value.

 This grouping method is very helpful and easy way to count the numbers.

- Demonstrate this by drawing the column of hundreds (H), tens (T) and ones (O) on the board.
- Say a number and explain the students that as we say the number, we write accordingly.

  For example, 3 hundred 25. So 3 will come under hundred's place, 2 will come under tens place and 5 will come under ones place.
- Revise this concept by giving some more examples.
- Include the students in this activity for better understanding.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Reading and Writing 3-digit Numbers and Before, After and Between Numbers

Aim: To make the learners solve reading and writing 3-digit numbers and before, after and between numbers

Strategy: The teacher to:
- Start the activity with the use of flashcards from number 0 to 9 and cutouts of H, T, and O.
- Place them in such a way that everyone can see them properly.
- Start placing the numbers below the place value cutouts.
- Explain the students how to say the number as you place the numbers.
- Instruct the students that first number will have hundred behind it and last 2 numbers will be said together.
- Now, say a number and ask the student how to write it by demonstrating it.
- Call some students in front of the board and ask them to write or say the 3-digit numbers.
- Write some questions on the board on before, after and between numbers.
- Explain the students that 'before' numbers means the number that comes previous to it, 'after' means next number and 'between' itself says in middle.
- Call the students one by one and ask them to solve the questions given on the board.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Place Value and Face Value, Expanded and Short Form of Numbers

Aim: To make the learners solve place value and expanded and short form of numbers

Strategy: The teacher to:
- Ask the students to have a recap of face value and place value concept.
- Explain them that place value is the digit that depends upon its place in the number.

  Face value of a digit is its actual value.

- Demonstrate this with the use of flash cards and cutouts.
- Place the cutouts and a number 527 under it (for an activity).
- Explain the students that the place value of 5 is 500 but the face value is the actual number, so the face value is 5.
- Ask the students the place value and face value for tens and ones number.
- Place different numbers under the cutouts and ask the students to answer the place value and face value.
- After this, explain the students the expanded and short form.
- Explain that expanded form means writing the place value for every number and keep adding them.

  Example: 619 = 600 + 10 + 9.
- Guide them by saying their place values.
- Explain them that here we have to write the face value for short form.

  Example: 300 + 40 + 7 = 347.
- Give few more examples and involve the students.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Comparing of Numbers and Formation of the Largest and Smallest Numbers

Aim: To make the learners solve comparing of numbers and formation of the largest and smallest numbers

Strategy: The teacher to:

- Explain the students that comparison of numbers means comparing any 2 numbers and saying which one is big and which one is small.
- Explain the students that we have a symbol which indicates a crocodile's mouth.
- The crocodile is hungry so it will eat the bigger number and the tail facing will be smaller number.
- Explain this by demonstrating with the hands.
- Also show that when the numbers at both the sides are same, then we use = sign and it is known as equal to.
- Instruct the students that we should learn how to form largest and smallest numbers when 3-digits are given.
- First identify the biggest number then a smaller number and then the smallest number to form the biggest number of the given numbers.

- For smallest number, find smallest number then a bigger number than that and then the biggest number.
- Explain this with the help of some examples and abacus.

Activities /Project /Integration/Research Work:

1. **Integration:**

   Drama:

   Make the students do the drama of the numbers with the help of flash cards and cutouts.

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 76, 77, 78, 79, 80, 81, 82, 83, 84, 86, 87, and 88 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 72 of the main book.

Revision:

1. As a revision, the teacher to instruct the learners to do page 89 of the main book.

   Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

   ### Homework/ Assignment /Activity back Home:

2. The teacher to ask the learners to do page 21 and 22 of the workbook as their homework.

Assessment Means:

The teacher will divide the learners into pairs and give certain task cards. Within their pairs, they have to write their expanded form and the number name.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 7: Addition and Subtraction	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand addition of two 2-digit numbers and 3-digit numbers without carry over
2. To make the learners understand addition of two 3-digit numbers with carry over and problem sums
3. To make learners understand subtraction of a 2-digit number from a 3-digit number (without regrouping), and 3-digit numbers (without regrouping)
4. To make learners understand subtraction with regrouping, checking subtraction by addition and problem sums

Specific Objectives:

1. To make learners solve the addition of two 2-digit numbers and 3-digit numbers without carry over
2. To make the learners solve the addition of two 3-digit numbers with carry over and problem sums
3. To make the learners solve the subtraction of a 2-digit number from a 3-digit number (without regrouping), and 3-digit numbers (without regrouping)
4. To make the learners solve the subtraction with regrouping, checking subtraction by addition and problem sums

Learning Outcomes:

1. Learners begin to solve the addition of two 2-digit numbers and 3-digit numbers without carry over.
2. Learners begin to solve the addition of two 3-digit numbers with carry over.
3. Learners begin to solve the subtraction of a 2-digit number from a 3-digit number (without regrouping), and 3-digit numbers (without regrouping).
4. Learners begin to solve the subtraction with regrouping, checking subtraction by addition and problem sums.

Stage 2- Learning Plan

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve addition and subtraction in a fun way
2. To explore activities to explain the concept of addition and subtraction with 3-digit numbers

Teaching Aids:

1. Stationery/TL Aids: flashcards from 0-9 and cut-outs of H, T, O.
2. Printed Material/Books: Skillment Mathematics FS-5
3. Worksheets/Workbook: Workbook
4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Addition of Two 2-digit and 3-digit Numbers without Carry Over

Aim: To make learners solve the addition of two 2-digit and 3-digit numbers without carry over

Strategy: The teacher to:

- Revise the concepts of tens and ones.
- Revise by giving some questions to the students of two 2-digit numbers.
- Now, place the cutouts of H, T, O in such a way that every student can see.
- Place first 3-digit random numbers below the cutouts.
- Place random 2-digit numbers in the second place.
- Make sure that the sum is without carry over.

- Instruct the students to start adding from ones digit numbers.
- Add the numbers and explain the students by saying it.
- Ask the students randomly to say the sum of the question given.
- Place the flash cards for the answer also.
- Solve some problem sums related to the concept.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Addition of Two 3-digit Numbers with Carry Over and Problem Sums

Aim: To make the learners solve the addition of two 3-digit numbers with carry over and problem sums

Strategy: The teacher to:

- Guide the students that as they know 3-digit numbers so they will now learn how to add two 3-digit numbers with carry over.
- Initially explain addition of two 3-digit numbers without carry over.
- Write the question on the board under the columns of Hundreds, Tens and Ones.
- After explaining sum of two 3-digit numbers without carry over, write two 3-digit numbers that will have carry over.
- While solving, explain to the students that the sum is similar to that of two 2-digit numbers.

    They have to add the tens place first and carry over to the next number.
- In two 2-digit numbers, carry over is placed once but in two 3-digit numbers, if the number exceeds 9 then tens place face value will be placed on the top of the next number.
- Explain to the students by solving the sum.
- Ask the students randomly to solve this by calling them towards the board.
- After the concept is clear, explain the students the method of solving the problem sums of the same concept.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Subtraction of a 2-digit Number from a 3-digit Number (Without Regrouping), and 3-digit Numbers (Without Regrouping)

Aim: To make the learners solve the subtraction of a 2-digit number from a 3-digit number (without regrouping), and 3-digit numbers (without regrouping)

Strategy: The teacher to:

- Make use of flash cards and cut-outs of numbers and place values.
- Start the demonstration by subtracting two 2-digit numbers (without regrouping).
- With the help of cutouts, explain the students subtraction of two 3-digit numbers.
- Place random two 3-digit numbers under respective columns.
- Explain the students that this is very easy to solve.

  It is similar to subtracting two 2-digit numbers.

  We start subtracting from ones place and go further or we can say from left to right.

- Subtract ones, tens and hundreds numbers written below.
- Continue to explain the concept with some more examples until it is understood.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Subtraction with Regrouping, Checking Subtraction by Addition and Problem Sums

Aim: To make the learners solve the subtraction with regrouping, checking subtraction by addition and problem sums

Strategy: The teacher to:

- Write a question of two 3-digit numbers on the board (see that the sum has regrouping in it).
- Guide the students that we will start from left to right or from ones column.
- Explain the students that similar to two 2-digit numbers, here also regrouping will be done.
- Ask the students to remember the concept of checking subtraction by addition.
- Hint the students that addition will be done by the smaller number of the question and the answer.
- Explain the concept of checking subtraction by addition by calling some students and asking them to solve the questions.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**
   NIL
2. **(Pls specify about project work / research work and details as per the activities)**
   Nil

(To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 94, 95, 96, 97, 98, 99, 100, 101, 103, 104, 105, and 106 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 93 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do page 107 and 108 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

2. The teacher to ask the learners to do pages 23, 24, and 25 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to solve some addition and subtraction sums on the board.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 8: Fractions	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the meaning of fraction and concept of half
2. To make the learners understand the concept of one-third
3. To make learners understand the concept of one-fourth and three-fourth

Specific Objectives:

1. To make the learners solve the meaning of fraction and concept of half
2. To make the learners solve the concept of one-third
3. To make the learners solve the concept of one-fourth and three-fourth

Learning Outcomes:

1. Learners begin to solve the concept of half.
2. Learners begin to solve the concept of one-third.
3. Learners begin to solve the concept of one-fourth and three-fourth.

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve fractions in a fun way

2. To explore activities to explain the concept of half, one-third, one-fourth and three-fourth

Teaching Aids:

1. Stationery/TL Aids: used paper, 3 to 4 circle paper cutouts, fraction cards

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Meaning of Fraction and Concept of Fraction-Half

Aim: To understand the concept of half

Strategy: The teacher to:

• Begin the session by explaining the meaning of fractions.

  If we want to divide anything into equal parts, each part represents as a fraction.

• Give an example like if we want to serve pizza to six people, we cut it into six equal pieces. Each piece is a fraction of that whole pizza.

  Fraction is written symbolically as '/'. We write numbers on either sides of this slash.

• Explain this to the students by drawing some objects on the board and making equal pieces of it.

• Explain the students that half means anything divided into 2 parts equally.

• For demonstration take a used paper and fold it into half. Show it to the students.

• Guide the students how to write half symbolically by writing on the board.

  The correct symbol of fraction is ½ for the term half.

• Explain to the students how this symbol is formed.

  We write total number of pieces that we get below the slash after folding the paper, i.e. 2.

On the top of the slash, we write those many number of pieces that we are talking about, i.e. 1.

- Explain this with different examples and involve the students.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Concept of Fraction – One-third

Aim: To solve the concept of one-third

Strategy: The teacher to:

- Explain the students that one-third means anything divided into 3 parts equally.
- For demonstration, take a used paper and fold it into three equal parts. Show it to the students.
- Demonstrate this with the cut-out of a circle also.
- Guide the students how to write one-third symbolically by writing on the board.

  The correct symbol of fraction is 1/3 for the term one-third.
- Explain to the students how this symbol is formed.

  We write total number of pieces that we get below the slash after folding the paper, i.e. 3.

  On the top of the slash, we write those many number of pieces that we are talking about, i.e 1.
- Explain this with different examples and involve the students.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Concepts of Fraction – One-Fourth and Three-Fourth

Aim: To understand the concept of one-fourth and three-fourth

Strategy: The teacher to:

- Explain the students that one fourth means anything divided into 4 parts equally.
- For demonstration, take a cutout of a circle and fold it into four equal parts. Show it to the students.
- Guide the students how to write one-fourth symbolically by writing on the board.

  The correct symbol of fraction is ¼ for the term one-fourth.
- Explain to the students how this symbol is formed.

  We write total number of pieces that we get below the slash after folding the cutout of a circle, i.e. 4.

  On the top of the slash, we write those many number of pieces that we are talking about, i.e. 1.
- Now, explain the students the concept of three-fourth.

- Symbolically we write three-fourth as 3/4.
- Explain the students why 3 is written on the top with the same cutout of circle. From total four parts, when we are talking about 3 parts of fraction, it is known as ¾ part of that circle.
- For better understanding, draw objects on the board and explain by shading the part of fractions.
- Explain this with different examples and involve the students.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**
   Ask the students to take the cutouts, demonstrate by themselves and come with their own fractions. Correct them if they are wrong somewhere.

2. **(Pls specify about project work / research work and details as per the activities)**
   Nil
   (To be further elaborated by the teacher)

Class work:

NIL

Reinforcement of Contents: (Pls write the key points that teacher will reinforce)

NIL

Revision:

1. As a revision, the teacher to instruct the learners to do page 113 and 114 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

2. The teacher to ask the learners to do page 26 and 27 of the workbook as their homework.

Assessment Means:

The teacher to provide cut-outs of fraction cards to one set of students and shape cut-out cards for another set of students. Ask the students to pair with one of the students having the same fraction card as the shaded part of the another student.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 9: Measurement	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand about measurement, concept of measurement of length, and addition and subtraction sums related to measurement of length
2. To make the learners understand the concept of measurement of weight and addition and subtraction sums related to measurement of weight
3. To make learners understand the concept of measurement of capacity and addition and subtraction sums related to measurement of capacity

Specific Objectives:

1. To make the learners solve the addition and subtraction sums related to measurement of length
2. To make the learners solve the addition and subtraction sums related to measurement of weight
3. To make the learners solve the addition and subtraction sums related to measurement of capacity

Learning Outcomes:

1. Learners begin to solve the addition and subtraction sums related to measurement of length.
2. Learners begin to solve the addition and subtraction sums related to measurement of weight.
3. Learners begin to solve the addition and subtraction sums related to measurement of capacity.

Stage 2- Learning Plan

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can solve addition and subtraction sums related to measurement in a fun way
2. To explore activities to explain the concept of measurement

Teaching Aids:

1. Stationery/TL Aids: scale, pencil, beam balance and a pack water bottle
2. Printed Material/Books: Skillment Mathematics FS-5
3. Worksheets/Workbook: Workbook
4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Measurement, Concept of Measurement of Length, and Addition and Subtraction Sums Related to Measurement of Length

Aim: To make learners solve the addition and subtraction sums related to measurement of length

Strategy: The teacher to:

- Begin the interaction by explaining the meaning of measurement.

  Measurement helps us to find the length, weight, height, and capacity.

- Recall the topic from class-1.

- Explain that measurement of length helps us to know how long the object is. It also helps us to show the comparison between two objects.

- Guide the students that to measure length correctly, we have fixed measures which are centimetre (cm) for short length and metres (m) for long length.

  They are known as standard units.
- Demonstrate this with the scale and pencil.
- Take the scale in hand and measure the pencil. Inform the students about the measurement of the pencil, e.g.: it is 7 cm long.
- Similarly, ask the students to take their used pencils and scale and ask them to measure the length of it and write it in their notebook.
- Guide the students that 1 m = 100 cm with the help of scale.
- Explain to the students that just like other numbers, we can also add or subtract cm or m.
- Instruct the students that the rule of solving sums of measurement is that we have to write the numbers below its measurement as given in the question. Wherever any number is not given, we write 0 at its place.
- Explain this with some examples and also give some examples to solve to the students for better understanding.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Concept of Measurement of Weight and Addition and Subtraction Sums Related to Measurement of Weight

Aim: To make the learners solve the addition and subtraction sums related to measurement of weight

Strategy: The teacher to:

- Explain that measurement of weight helps us to know the weight of a particular object – how heavy or light it is.
- Compare this by taking a book in one hand and bag in another. Ask the students which object is heavy and which is light.

  The bag is heavy because it has more weight and the book is light because it has light weight.

  Weight is measured by using a balance. Two types of balance are there: 1. beam balance, and 2. electronic balance.
- Ask the students if they have seen the weighing scale with any vegetable vendor when they visit the market.

  The standard units of weight are grams (g) and kilograms (kg).
- Demonstrate this with beam balance and different weights if they are available.
- Guide the students that 1kg = 1000 g.

- Explain to the students that just like other numbers, we can also add or subtract kg and g.
- Demonstrate by showing example on the board.
- Instruct the students that the rule of solving sums of measurement is – we have to write the numbers below its measurements as given in the question. Wherever any number is not given, we write 0 at its place.
- Explain this with few examples and also give some examples to solve to the students for better understanding.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Concept of Measurement of Capacity and Addition and Subtraction Sums Related to Measurement of Capacity

Aim: To make the learners solve the addition and subtraction sums related to measurement of capacity

Strategy: The teacher to:
- Explain that measurement of capacity helps us to know how much liquid such as milk, water, etc. a container can hold.
- Guide the students that to measure correctly, the standard unit of measurement of capacity are millilitre (ml) and litre (l).
- Instruct the students that millilitre (ml) is used for smaller capacity of liquid and litre (l) is used for more capacity of liquid.
- Show a bottle of water and explain that this bottle contains 1 l of water. Show them the written label on the bottle.
- Ask them to check their own water bottle and if written somewhere, ask them to note its capacity.
- Guide the students that 1l = 1000 ml.
- Explain to the students that just like other numbers, we can also add or subtract ml or l.
- Demonstrate by showing example on the board.
- Instruct the students that the rule of solving sums of measurement is – we have to write the numbers below its measurements as given in the question. Wherever any number is not given, we write 0 at its place.
- Explain this with few examples and also give some examples to solve to the students for better understanding.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**
   NIL

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 118, 120, 121, 123, 124, 125, and 126 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 115 of the main book.

Revision:

1. As a revision, the teacher to instruct the learners to do page 127 and 128 of the main book.

   Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

2. The teacher to ask the learners to do pages 28, 29, 30, and 31 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to solve some addition and subtraction sums related to measures on the board.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 10: Money	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the meaning of money and concept of Indian currency
2. To make the learners understand the reading and writing of money
3. To make learners understand addition of money
4. To make learners understand addition and subtraction of rupees and paisa

Specific Objectives:

1. To make learners recognise Indian currency
2. To make the learners understand the reading and writing of money
3. To make the learners solve the addition of money
4. To make the learners solve the addition and subtraction of rupees and paisa

Learning Outcomes:

1. Learners begin to recognise Indian currency.
2. Learners begin to understand the reading and writing of money.
3. Learners begin to carry out the addition of money.
4. Learners begin to carry out the addition and subtraction of rupees and paisa.

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can count money

2. To explore activities to explain the concept of addition and subtraction of rupees and paisa

Teaching Aids:

1. Stationery/TL Aids: original currency notes and coins

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Meaning of Money and Concept of Indian Currency

Aim: To make learners recognise Indian currency

Strategy: The teacher to:

• Start the session by explaining the meaning of money to the students.

   We use money to buy something from others and in exchange we give money.

   Money is called currency.

• Draw the symbol of Rupee on the board and show to the students.

• Explain to the students that Indian currency is available in notes and coins.

   There are coins for Rupees 1, 2, 5, 10 and 20.

   There are notes for Rupees 5, 10, 20, 50, 100, 200, 500 and 2000.

• Guide the students that the currency changes according to the market.

• Sometimes the currency or note may be discontinued to use after the government bans a particular denomination.

• Show the students some coins and notes.

• Ask the students their experience of going to the market and purchasing something with the real money.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Reading and Writing Money

Aim: To make the learners read and write money denominations

Strategy: The teacher to:

- Revise the concept of Indian currency with the students.
- Explain that Indian currency has two categories: Rupees (Rs or ₹) and Paisa (p).
- Explain the meaning of paisa (p) to the students.
- Guide the students that 1 Rupee = 100 paise
- Also, demonstrate this by writing the format of rupees and paisa on the board.
  To avoid writing rupees and paisa again and again, we write dot in between e.g.:
  2.45 means 2 rupees and 45 paise.
- Write some wrong format on the board and ask the students to say the correct format.
- Also, give some questions to the students and ask them to write them into words in their notebooks.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Addition of Money

Aim: To make the learners solve the addition of money

Strategy: The teacher to:

- Recap the concepts from previous session.
- Tell them that they must have seen their parents adding money when they went to the market.
- Demonstrate this by showing the original currency to the students.
- Show to the students notes of 10 and 50.
- Write the numbers on the board within the tens and ones column.
- Explain the students that they have to do the addition of money similar to the addition of simple sums.
- Instruct them to start addition from ones place.
- Ask any random student to do the addition.
- Explain the concept with some more examples to the students.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 4 (Topic): Addition and Subtraction of Rupees and Paise

Aim: To make the learners solve the addition and subtraction of rupees and paise

Strategy: The teacher to:
- Recap the money addition concept and give some questions to the students to solve.
- Draw two columns of rupees and paise on the board.
- Write two numbers for rupees and paise under them.
- Explain the students that rupees will be added with rupees and paise will be added with paise.
- Demonstrate by adding both and show to the students the calculation for the question.
- Explain to the students that at the end when we get the answer, we place a dot to separate rupees and paise.
- Ask the students to solve some examples given on the board and ask them to check themselves while the teacher writes the answers on the board.
- Similarly, instruct the students that subtraction also can be done for currency.
- Show some examples and repeat the steps of subtraction here too.
- Instruct the students to solve some money problem sums of addition and subtraction.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:
1. **Integration:**
   Students can set-up a vegetable market with fake money and learn about the exchange of money and products by acting as shopkeeper and costumer.
2. **(Pls specify about project work / research work and details as per the activities)**
   Nil
   (To be further elaborated by the teacher)

Class work:
Teacher to make the learners do pages 131, 132, 133, and 134 of the main book as classwork.
(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:
As reinforcement, teacher to instruct the learners to do page 129 of the main book.

Revision:
As a revision, the teacher to instruct the learners to do pages 135 and 136 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

The teacher to ask the learners to do pages 32 and 33 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to make a list of items that can be bought with a 50 rupee note.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 11: Time	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand meaning of time and learn reading and writing the time
2. To make the learners understand reading time by half past and quarter past
3. To make learners understand days of the week, months of the year, knuckles rules, and seasons

Specific Objectives:

1. To make learners do reading and writing of the time
2. To make the learners read the time by half past and quarter past
3. To make the learners understand the days of the week, months of the year, knuckles rule, and seasons

Learning Outcomes:

1. Learners begin to read and write the time.
2. Learners begin to read the time by half past and quarter past.
3. Learners begin to understand the days of the week, months of the year, knuckles rule, and seasons.

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can read and write time in a fun way

2. To explore activities to explain the concept of days of week, months and seasons

Teaching Aids:

1. Stationery/TL Aids: model of analog clock

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Meaning of Time and Learn Reading and Writing the Time

Aim: To make learners understand the reading and writing of the time

Strategy: The teacher to:

• Explain the students the importance of time.

• Inform them that we do almost everything according to the time.

  A clock and a watch tells us a time. A clock is a piece that we put in a shop, office, classroom or our house and a watch is the one that we wear on our wrist.

• Guide the students that there is a special way to read the time.

  We say 2 o'clock or 2:00 when the time is two.

• Instruct the students that before colon, the number represents the hour time and after the colon, the number represents the minute time.

• Also, show the clock to the students for visual understanding.

• Move the hour and minute hands randomly and ask the students to tell the time.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Reading Time by Half Past and Quarter Past

Aim: To make the learners read the time by half past and quarter past

Strategy: The teacher to:

- Demonstrate half past and quarter past on the clock.
- Explain the students that when the minute hand is at 6 and the hour hand is between any two numbers, we tell the time by half past.

  When the minute hand moves from one number to another number, it is calculated as 5 minutes.

- Instruct the students that we use table of 5 to calculate the time.

  So when the minute hand is at 6, multiply it with 5 to get time in minutes. i.e. 6 x 5 = 30.

- Explain the students that with the help of clock.

  Similarly, quarter past means ¼ th part of the clock.

  When the minute hand is at number 3, it is calculated as quarter past.

- Calculate the minutes, i.e. 3 x 5 = 15.

  The time will be read as 4 hours and 15 minutes or 4:15.

- Explain this concept with some more examples.
- Also, call some students to solve some questions for better understanding.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Days of the Week, Months of the Year, Knuckles Rule, and Seasons

Aim: To make the learners understand the days of the week, months of the year, knuckles rule, and seasons

Strategy: The teacher to:

- Ask the students to speak out the days of the week loudly.
- Explain the students some facts about time:
  - 1 hour is 60 minutes.
  - 24 hours is one day.
  - 7 days make a week.
  - 30 days make a month.
  - 4 or 5 weeks make a month.
  - 12 months make a year.
  - 365 or 366 (leap year) days also make a year.
  - 52 weeks also make a year.
- Explain the students how to see a calendar.
- Tell the students that the previous day is yesterday, the present day is today and the next day is tomorrow.

- Inform the students that we have a particular weather every month, which is called season.

  In Hindi we call it as *Ritu.*
- Explain the chart of seasons or *Ritu* in English as well as Hindi.
- Demonstrate the calculation of months through knuckles.
- Ask the students to do it along with the teacher.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**

   Drama:

   Students can be divided into groups and can present a skit on seasons in front of the class.

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 138, 139, 140, 141, 142, 144 and 145 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 137 of the main book.

Revision:

1. As a revision, the teacher to instruct the learners do pages 146, 147, and 148 of the main book.

   Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

2. The teacher to ask the learners to do pages 34, 35, and 36 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to make their daily routine and mention the time along.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 12: Shapes and Patterns	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand about plane shapes, straight lines and curved lines, and types of straight lines
2. To make the learners understand about solid shapes
3. To make learners understand the concept of patterns

Specific Objectives:

1. To make learners solve the plane shapes, straight lines and curved lines, and types of straight lines
2. To make the learners solve the solid shapes
3. To make the learners solve the concept of patterns

Learning Outcomes:

1. Learners begin to solve the plane shapes, straight lines and curved lines, and types of straight lines.
2. Learners begin to solve the solid shapes.
3. Learners begin to solve the concept of patterns.

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

To explore different ways in which the learners can understand lines, shapes and patterns

Teaching Aids:

1. Stationery/TL Aids: ball, book and compass box
2. Printed Material/Books: Skillment Mathematics FS-5
3. Worksheets/Workbook: Workbook
4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Plane Shapes, Straight Lines and Curved Lines, and Types of Straight Lines

Aim: To make learners solve the plane shapes, straight lines and curved lines, and types of straight lines

Strategy: The teacher to:

*   Ask the students whether they remember about shapes from class 1.
*   Draw some shapes on the board and ask the students to identify them.
*   Explain the students about the sides and corners of the plane shapes.
*   Explain the students by pointing out towards the image on the board:
    *   Triangle has 3 sides and 3 corners.
    *   Square has 4 sides and 4 corners.
    *   Rectangle has 4 sides and 4 corners.
    *   Circle has no side and no corners.
*   Guide the students that shapes are formed of lines; some are straight and some are curved.

    If we look at the lines of triangle, square and rectangle, they are made of straight lines but when look at the circle, it is made of a curved line.

    Similarly, every object that we see is either made of straight or curved lines.

*   Explain the students about the types of lines.
*   There are three ways that straight lines can be drawn. First sleeping or horizontal line, second vertical or standing line and third slanting line.

- Draw all these lines on the board and explain the students by showing different shapes.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Solid Shapes

Aim: To make the learners understand the solid shapes

Strategy: The teacher to:

- Explain the students the meaning of solid shapes.

  When plane shapes are made into some 3D objects then they are called solid shapes or 3D objects.

- Show some examples of solid shapes (ball, book, compass box).
- Draw the solid shapes on the board.
- Explain the students that when any particular plane shape is turned into solid shape, the name of that shape changes.

  square = cube, rectangle = cuboid, triangle = cone, and circle = sphere

- Explain every shape and write the names below the drawing on the board.
- Also, explain the shape of cylinder.
- Guide the students about the face, edge and corners of solid shapes.

  Cube has 6 faces, 12 edges and 8 corners or vertices; cuboid has 6 faces, 12 edges and 8 corners or vertices; sphere has 1 face, 0 edge and 0 corners, and so on.

- Ask the students to look at the objects and say which shape they have.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 3 (Topic): Concept of Patterns

Aim: To make the learners understand the concept of patterns

Strategy: The teacher to:

- Explain the students the concept of patterns.

  Pattern means repeating certain shape, figure or colour in order.

- Show the pattern designs by collecting pencils, erasers and sharpners from the students.

  Pattern can be made by using numbers, shapes, colours and alphabets.

- Ask the students to take their drawing books and draw any 5 patterns they like to draw.
- After that explain the students that patterns can be in the form of skip counting too.
- Write one pattern of skip counting on the board and explain the students.

- Ask the students to make one pattern with skip counting and exchange their notebooks with their partners. Their partners will guess the pattern of skip.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**

   NIL

2. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 151, 152, 154, 155, and 157 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 149 of the main book.

Revision:

As a revision, the teacher to instruct the learners to do pages 158 and 159 of the main book.

Note:- Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

The teacher to ask the learners to do page 37 and 38 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to create their own patterns in their notebook.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments conducted)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests
2. Number of learners and facilitators/teachers in a class
3. Creative teaching learning methods
4. List of vocabulary for reading and writing for practice for learners
5. Assessment schedule of the school
6. Holidays and events held in the school

LESSON PLAN

DATE (Date/Period of execution)			
FS-5 (Class-2)	Section _____ (To be filled by the teacher)	No. of Students (To be filled by the teacher)	_____learners
Subject	Math	Duration of Period	_____minutes
THEME/ CONTENT/ CHAPTER	Chapter 13: Data Handling	UNIT/SUB-UNIT	
NAME OF THE TEACHER(S) (To be filled by the teacher)			_____

Stage 1- Desired Results

General Objectives:

1. To make the learners understand the meaning of data handling
2. To make the learners understand reading of the data

Specific Objectives:

1. To make learners solve the data handling
2. To make the learners solve the reading the data

Learning Outcomes:

1. Learners begin to do the data handling.
2. Learners begin to understand the reading the data.

Teachers to Gauge Previous Knowledge of the Students/ Pre-Preparation Before taking the Session:

1. To explore different ways in which the learners can do data handling in a fun way

2. To explore activities explaining the concept of data handling

Teaching Aids:

1. Stationery/TL Aids: 10 books, 7 erasers, 6 pencils and 4 sharpeners

2. Printed Material/Books: Skillment Mathematics FS-5

3. Worksheets/Workbook: Workbook

4. Multimedia / Video link: NIL

Methodology:

Session/Period 1(Topic): Data Handling

Aim: To make learners do the data handling

Strategy: The teacher to:

• Explain the meaning of data handling by giving an example.

• Tell the students that data hand handling means collecting, arranging and presenting particular data.

• Explain with the example of keeping 10 books, 7 erasers, 6 pencils and 4 sharpeners in front.

• Mix all the items together and place them on the table.

• Call one student in front and ask him/her to sort, count and place pencils on the table properly.

• Similarly call different students to do the same for each item.

• Simultaneously, write the count of each item on the board.

• Explain the students that arranging in the proper order and counting is data handling.

• Ask the students to take their drawing book and draw a data handling table according to them by seeing the pattern from the board.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Session/Period 2 (Topic): Reading the Data

Aim: To make the learners understand the reading the data

Strategy: The teacher to:

- Read the data by looking at the table given and answering the questions asked related to the table.
- Explain this by drawing a table on the board.
- 2 columns (Items and Number). 4 Items– ball (7), bat (4), car (3) and book (9) can be written and drawn on the board.
- Ask the following questions to the students.
  - ➢ How many balls did you buy?
  - ➢ How many books did you buy?
  - ➢ How many more books are there than balls?
  - ➢ What will be the total number of ball and books?
  - ➢ How many bats did you buy?
- Give some more examples related to other data.
- Provide data in a question for the class and ask one student to come in front and frame few questions and ask the other students.
- Continue this activity with other students.

Expected Skills achieved by the learners: Cognitive skills, Numeracy skills

Activities /Project /Integration/Research Work:

1. **Integration:**

   NIL

1. **(Pls specify about project work / research work and details as per the activities)**

   Nil

   (To be further elaborated by the teacher)

Class work:

Teacher to make the learners do pages 162 and 163 of the main book as classwork.

(The teacher may use the teaching aids and discussion to give repetition/practice of the contents delivered as class work.)

Reinforcement of Contents:

As reinforcement, teacher to instruct the learners to do page 160 of the main book.

Maths FS-5 Lesson Plan

Revision:

As a revision, the teacher to instruct the learners to do pages 164 and 165 of the main book.

Note:– Respective teacher to further plan the session based on the understanding **reflected** by the learners in the class. Teacher can also suggest the learners to **inquire** further.

Homework/ Assignment /Activity back Home:

The teacher to ask the learners to do pages 39 and 40 of the workbook as their homework.

Assessment Means:

The teacher to ask the learners to collect the data regarding the number of learners in their class who like the following activities.

➢ Art and Craft

➢ Sports

➢ Reading

➢ Any other

Also, ask them to represent the data in pictorial form.

(To be further decided by the teacher to assess the learners by oral test/interactive session/activity)

Specific Observations:

(To be filled by the teacher for learners/class based on reflection, interaction and assessments **conducted**)

Note for Teachers to Modify the Lesson Plan Prototype Based on:

1. Learners needs and interests

2. Number of learners and facilitators/teachers in a class

3. Creative teaching learning methods

4. List of vocabulary for reading and writing for practice for learners

5. Assessment schedule of the school

6. Holidays and events held in the school