

April -2023

Number of working days

Topic

Lesson 1 Shapes

1.1 Circle and its parts

1.2 Reflection and symmetry

Lesson 2 Patterns

2.1 Pattern based on symmetry

Lesson 1 Shape

Learning Outcomes

Knowledge objectives

Students will be able to learn about circle different parts of circle, meaning of symmetry and reflection.

Understanding objectives

Students will understand the relationship between radius and diameter and will be able to differentiate the terms perimeters and circumference and symmetrical and non symmetrical objects.

Application objectives

Students will be able to apply the concept of circle and symmetry to their daily life.

Skill objective

Students will develop the skill to use compass to draw different design including one circle or many circles (e.g symbol of Olympic games) and makes symmetrical objects.

Teaching Aids

Chalk, duster, board shapes (bangles, coins, rectangle, triangle), compass, lab videos etc.

Previous knowledge testing

Student will be asked

- What is the line ?
- Difference between open/closed figures?
- How many sides of a rectangle are equal?
- How can we divide a square into two equal parts?

Pedagogical strategies

First of all teachers will help the students to recall 2 dimensional figures open/closed figures. Then concept of circle will be explained from textbook

A circle is a simple closed figure with no edges or corners. A bangle, a coin, a few common items which are in the shape of a circle.

After they understand the concept of circle, teacher will explain parts of a circle by doing small paper folding activity. Then relation between radius and diameter will be explained to the students ie $d=2r$, $r= d\div 2$

After this word problem will be explained by giving examples from day to day life and how to draw a circle using compass will be explained. Next topic of symmetry and reflection will be explained by using activity based method (Paper folding activity)

“A dotted line which divides a figure into exactly two halves is called the line of symmetry.”

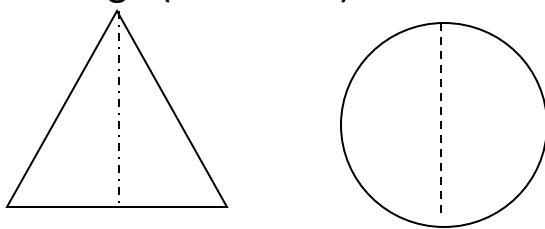
Group activity

Students will be divided into three groups

1st group will be asked to bring different figures and to draw their possible number of lines of symmetry.

2nd group will be asked to bring different figures and draw their mirror images (reflection)

3rd group will be asked to bring English alphabets which look same in their water image (reflection)



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B

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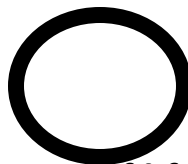
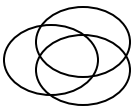
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Art integration

Students will be taken to the Maths lab and asked to draw circles of different objects like bangles, coins, bottles caps etc and show their parts. Students will draw different designs of circles e.g. symbol of Olympic games.



Interdisciplinary linkage and infusion of life skill

Students will be able to understand that which objects are symmetrical and which are non-symmetrical, how circular objects differs from spherical objects. As the students perform group activities so they will develop the spirit of co-operation, collaboration, sharing and caring.

Recapitulation

Recapitulation of concept 11 and 1.2 will be done. Oral revision of wide, and Symmetry will be given.

Resources including ICT

E- books, worksheets, internet, you tube.

Assessment items

To check the conceptual clarity of the students different assessment tools will be used. Different types of questions from textbook and workbook (MCA, fill ups, matching , w.b) will be given in the form of practice worksheet.

Feedback and remedial teaching

Enter attention will be paid on students with less I.Q or slow writers. Regular practice of tables will be given side by side.

Inclusive practices and full participation without discrimination

- Group activity
- Watching videos
- Charts
- Books
- Callaboration
- Hand on activities
- Experiential learning

Lesson 2 Patterns

Lesson 1 Shape

Learning Outcomes

Knowledge objectives

students will be able to learn about patterns in lines and shapes line and axis of symmetry symmetrical patterns.

Understanding objectives

Students will understand about into brand kinds of patterns , natural patterns and manmade (artificial) patterns

Application objectives

Students will be able to apply the knowledge of patterns in their day to day life.

Skill objective

Students will develop the skill to create different types of patterns using lines or shapes and numbers.

Previous knowledge testing

Students will be asked about

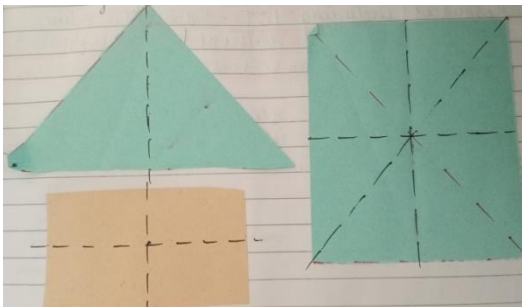
- Different types of lines (vertical, horizontal etc)
- Lines of symmetry
- No. of symmetry in square, rectangle etc.
- How symmetry and patterns are interlinked.

Teaching Aids

Chalk, duster, board , pics of butterfly and tiles, surrounding etc.

Pedagogical strategies

Teacher will explain to the students that symmetry is very closely related to the pattern different symmetrical figures will be explained and shown to the students. After that teachers will explain that the arrangement of shapes , figures and designs in a certain way is called a pattern. Next different kind of patterns and methods to create pattern will be explained to the student by taking examples from their day to day life like window grill. Butterflies, wall papers etc. palindromes will also be explained by giving examples.



Group activity

Students will be divided into group and asked to make different types of pattern.

Eg. $1 \times 1 = 2$

$$11 \times 11 = 121$$

$$111 \times 111 = 12321$$

$$1111 \times 1111 = 1234321 \dots\dots\dots\text{etc}$$

Art integration


Students will be ask to cut and shapes like square, circle, triangle from a colourful sheet told it to divide it into turn or more equal parts the line of symmetry may be horizontal a vertical or both.

Interdisciplinary linkage and infusion of life skill


Students will understand that there are many shapes and figures which have some pattern and many do not follow any pattern they will start observing the things carefully and hence develop attentiveness, creativeness and logical thinking.

The image shows two sections of educational material. The top section is titled "Science Fun" and discusses symmetry in nature, using a butterfly as an example. The bottom section is titled "Social Studies Fun" and discusses symmetry in monuments, using the National War Memorial in Pune as an example. Both sections include text and images illustrating the concept of symmetry.

Science Fun
We can see symmetry in nature around us. For example, some insects like the butterfly are symmetrical as shown. Find some more insects which show symmetry.



Social Studies Fun
Many monuments are symmetrical in nature. Look at this picture of the National War Memorial located in Pune. This monument has a vertical line of symmetry.



Recapitulation

Observe the patterns and fill in the blanks

A1- 8, 13, 18, 23, ____, ____, ____

B1- 6, 12, 24, 48, ____, ____, ____

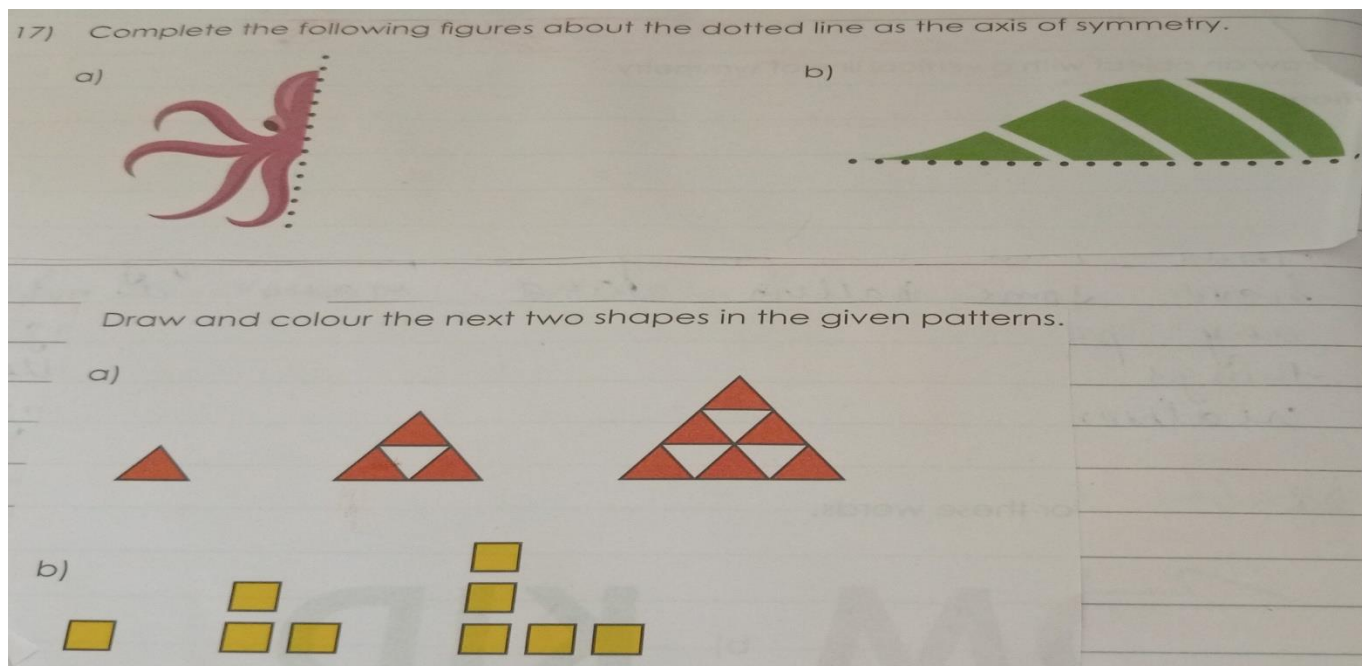
Resources including ICT

E-books, online reference material

<https://youtube.be/xirby>

Assessment items

Students will be given a class list in which fill ups, MCQ will be given.



Feedback and remedial teaching

Enter attention will be paid on students with less I.Q or slow writers. Regular practice of tables will be given side by side.

Inclusive practices and full participation without discrimination

- Group activity
- Manage classroom behavior
- Work as a team
- Showing videos

- Creative writing
- Reading books.

May , 2023

No. of working days

Topic Lesson 3

3.1 count by ten thousands

3.2 Compare and order 5 digit no.

3.3 round off numbers

Lesson 4 Addition and Subtraction

4.1 add and subtract 5 digit numbers

Lesson 3 Numbers

Learning Outcomes

Knowledge objectives

Students will be able to understand smallest and largest 4 digit and 5 digit numbers, reading and writing of 5 digit numbers.

Understanding objectives – Students will understand how to compare and order 5 digit no. and how to find place value and face value of the nos.

Application objectives – Students will be able to use this concept In their daily life and importance of number.

Skill objectives – Students will be able to form the largest and the smallest 5digit no. they can make abacus tool .

Previous knowledge testing – Students will be asked the following questions

- Smallest /greatest 4 digit no.
- _____ is the predecessor of 3200
- 1 more than 999 is _____.

iv. How many places are there in thousand period?

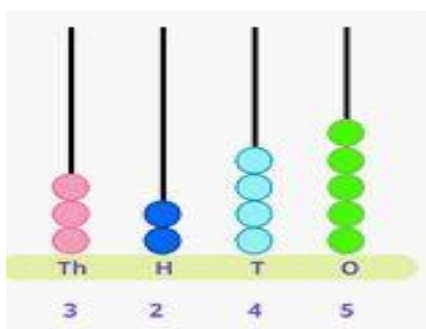
Teaching aids – Chalk , duster, board, video clips, place value chart, abacus etc.

Pedagogical strategies – Students will be taught that the place value chart helps us to find out the value of each digit of a number according to its position by showing a model of Indian place value chart and model of abacus. After this teacher will explain place/face value, expanded/short form reading/writing of 5 digit numbers. After making sure that the students have understood all the basic I basic terms related to the numbers comparison and rounding of numbers will be explained to the students by giving example from their daily life.



Group activity –

Students will be divided into four groups. Each group will make a model of abacus using sponge, sticks and beads. One group will make as well as read the number on abacus (Model) assigned by the other group. The group which makes correct number will score 10 points. In case, they are unable to make the correct number then the opposite team will get 3 bone is marks. After that next group will get there turn and so on.



Resources including ICT – E books, worksheets, videos, internet

<https://youtube.be/xirby>

Assessment items – Students will be asked to complete qdrill time 1 and 2 which contain MCQ, and word problems from timebook and practice questions (daily 5) from their workbook.

Feedback and remedial teaching –

Extra attention will be paid on slow learners/weak students. They will be engaged in hand-on activities so that they can learn easily.

Inclusive practices and full participation without discrimination

- Creating opportunities to listen to all children.
- Develop a 'scaffold' it approach to learning.
- Be aware of specific needs of every child.
- Work as a team.
- Build community.
- Manage classroom behavior.
- Do not compare the progress of one child to another.

L – 4 Addition and Subtraction

Learning Outcomes

Knowledge objectives

To make them acquainted with the knowledge properties of addition and subtraction.

Understanding objectives

Student will be understand the meaning of addition and subtraction.

Application objectives

Students will be able to apply addition and subtraction operation in real life situations.

Skill objectives

They will be acquainted with the skill of adding and subtracting 5 digit numbers.

Previous knowledge testing

Students will be asked the following questions.

- i. $0 + 328 = \underline{\hspace{2cm}}$
- ii. $267 + 15 = \underline{\hspace{1cm}} + 267$
- iii. $993 + \underline{\hspace{2cm}} = 994$

Teaching aids

Chalk, duster, green board, smart board, videos, you tube.

Pedagogical strategies

Teacher will explain the students the concept of adding and subtraction by giving example from daily life.

In Jasleen's town, there were 27023 adults and 1567 children.
1400 adults and 1200 children went out of the town on 23rd March 2015. What was the to
population of the town on 23rd March? What was the population on the 22nd, if all of the
were present in the town that day?
Can you also solve it?

	T	Th	Th	H	T	O
				1	1	
	4	8	4	1	5	
+	2	0	0	9	8	
	6	8	5	1	3	

	15	16			
4	5	6	11		
5	6	7	7	8	
1	6	7	5	4	
3	9	9	6	4	

Students will be taught properties of Add and subtract and word problem of Add and subtraction by using showing videos on smart class board

Properties of ADD -

Properties of Add -

1. A zero added to a number does not change the value of the number.
Example : $12345 + 0 = 12345$

2. 1 added to a number gives the successor of a number as the sum.
Example : $766 + 1 = 767$
3. If two numbers are added in any order their sum remains the same.
Example : $1445 + 2216 = 2216 + 1445 = 3661$

Properties of Subtraction

1. If 0 is subtracted from a number, the difference is the number itself.
Example : $6789 - 0 = 6789$
2. 1 subtracted from a number gives the predecessor of the number as the difference.
Example : $4698 - 1 = 4697$
3. A number subtracted from itself gives zero as the difference.
Example : $4583 - 4583 = 0$

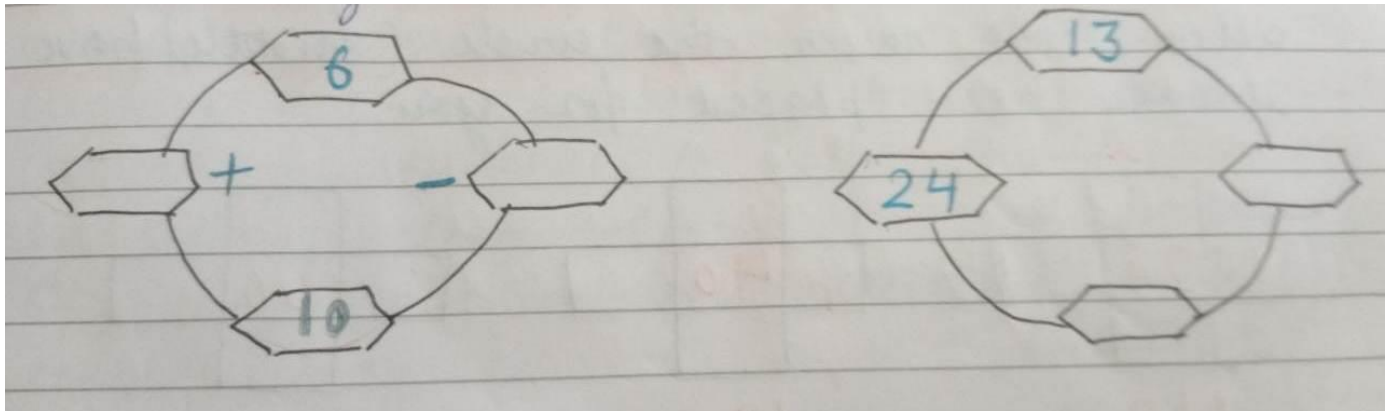
Group activity

Student will be ask arrange the numbers from 0 to 9 along the sides of the triangle such that the sum of the numerals along each side of the triangle is the same (use each number once) example magic triangle.

2 + 7 + 3 + 8 = 20
2 + 4 + 9 + 5 = 20
8 + 6 + 1 + 5 = 20

Art intergration

Students will be asked to draw the following shapes and find the missing numbers.



Iterdisciplinmary linkage and infusion of like skill

Students will be taught that how the concept of addition and subtraction will be help them to study other objects.

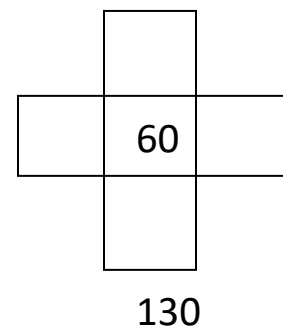
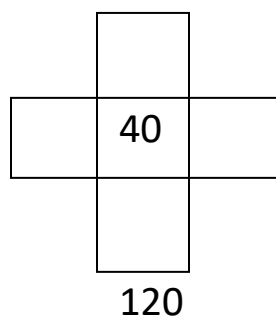
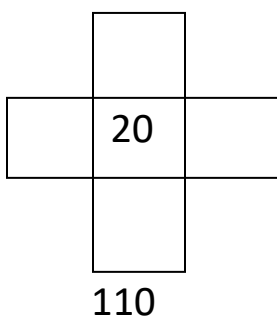
While doing all the activities in group students will learn various life skills like sharing and caring helping each other corporation with their classmates etc. They will develop logical thinking and will become creative.

Recapitulation –

To check the concept of addition and subtraction teacher will give them worksheet to solve.

Eg.

Arrange the numbers 23, 40, 50 and 60 each time so that the horizontal and vertical total match the target total below the number in the circle middle have already been placed for you.



Pick three of these numbers that can be same or different. The three numbers must total 1000.

393	121	211	333	444	332
536	235	372	292	600	368

Resources including ICT

E-books, videos, worksheets, smart boards.

<http://youtube/nvsQ3nUYHWU>

Assessment items

Student will be asked to complete drill time which contains questions of addition subtraction and their word world from textbook and daily five question will be done from practice questions given in workbook. Regular practice of tables will be given to the students.

Feedback and remedial teaching

Slow writer weak students will be given extra attention remainder classes will be conducted for the better understanding of the concept.

Inclusive practices and full participation without discrimination

- Creating up come purposeful learning environment.
- Dating opportunities to listen to all children.
- By defining clear minimum tenders for behavior.
- By dealing with low level disruption in a sensitive way.

July -2023

Number of working days -

Topic

Lesson 5 Multiplication

5.1 Multiply 3 digit and 4 digit numbers

5.2 Multiply using lattice algorithm

5.3 Multiply using lattice algorithm

Lesson 6 Time

6.1 Duration of time

6.2 Estimate time

Lesson 5 Multiplication

Learning Outcomes

Knowledge objectives

To make them acquainted with the properties of multiplication.

Understanding objectives

Student will understand the meaning of multiply and different terms related to multiply like multiplicand, multiplies, multiple.

Application objectives

Students will be able to apply the concept of multiply in their day to day life and hence understand its importance.

Skill objective

Students will be developed the skills to multiply using standard and lattice algorithm to multiply mentally.

Teaching Aids

Chalk, duster, green board, smart board, colourful strips of paper, placards, videos etc.

Previous knowledge testing

As they have done multiply in their previous classes so simple questions based on multiply will be asked

Eg.

$$375 \times 1 = \underline{375}$$

$$0 \times 68 = \underline{0}$$

$$5 + 5 + 5 + 5 = \underline{5 \times 4 = 20}$$

Pedagogical strategies

Teachers will introduce the topic by showing models in smart class activity based method will be used to make some students understand the concept of multiply and various terms related to the multiply. YouTube videos will be shown to explain lattice algorithm to the students. Placard will be used to give sufficient practice of multiplying mentally what problem will be explained by giving example from day to day life.

Standard algorithm is the method of multiplication in which the product is regrouped as ones & tens

Lattice Algorithm

	4	3	x	
2	2	1		5
0	0	0		2
2	8	6		
	3	6		

Therefore,
 $43 \times 52 = 2236$.

There are two ways to multiply numbers:
1) Standard Algorithm
2) Lattice Algorithm

Multiplicand	- The number to be multiplied.
Multiplier	- The number by which the given number is multiplied.
Product	- The result of multiplication.

Properties of Multiply -

1. The product of a number and 1 is the number itself.
Example : $365 \times 1 = 365$

2. The product of a number and 0 is 0 (zero).
Example : $9 \times 0 = 0$

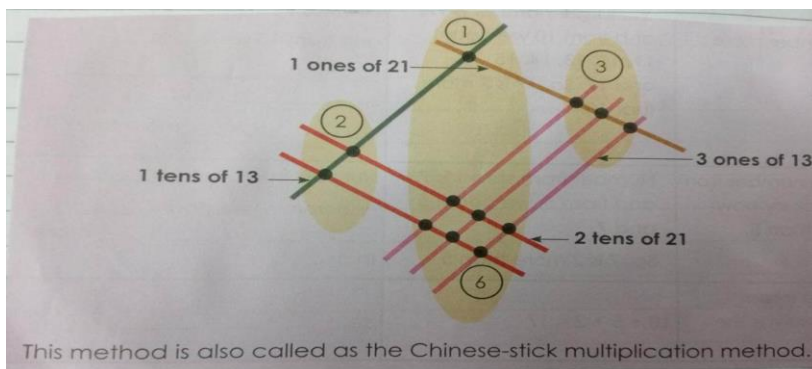
3. The product of two numbers does not change even if we change the order of the numbers.
Example : $202 \times 2 = 404$
 $2 \times 202 = 404$



4. The product of the numbers does not change even if we change the groupings.
Example :
 $(12 \times 7) \times 5 = 84 \times 5 = 420$
or $12 \times (7 \times 5) = 12 \times 35 = 420$
So, $(12 \times 7) \times 5 = 12 \times (7 \times 5)$

Group activity

Students will be asked to multiply a 4 digit number by 1 digit number by using colourful strips and by counting points of interaction under different places.



Art integration

student will be asked to draw a lattice in which number of rows is equal to number of digits in the multiplier and number of columns is equal to the number of digits in the multiplicand. The number of the multiplier is written at the top and the number of the multiplicand is written on the side. The numbers are added diagonally from the right so on we add the numbers in the

months place then the number in the tens place and so on now write the sum from left to right.


As they will do all the activities in groups so they will learn various life skills like helping each other caring for the friends, collaborative learning.

— There are 345 students in each class. Pooja's school has 12 such classes. How many students are there in her school?

Number of students in each class = 345
Number of such classes in Pooja's school = 12

Total number of students
= $345 \times 12 = 4140$

Therefore, there are 4140 students in Pooja's school.




Interdisciplinary linkage and infusion of life skill

Social Studies Fun

The oldest known multiplication table was found written on bamboo strips in China around 2300 years ago.

Modern multiplication tables are said to have been written down by the famous Greek mathematician Pythagoras. It is also called the Table of Pythagoras in many other languages.



English Fun

The word 'Lattice' in lattice algorithm is not an English word originally. The word is taken from 'lattis', in old French language which itself has been taken from 'latte' or 'lath', that means the wire mesh used for backing in the old German language.

As they will do all the activities in groups so they will learn various life skill like helping each other caring for their friends, collaborative learning etc.

Recapitulation

To check the understanding few questions will be given to the students like Fill ups, MCQ, short question answers, word problems etc.

Resources including ICT

Smart board, youtube , Model of a clock, E-books.

Assessment items

Students will be given 5 practice questions from workbook on regular basis and drill time will also be done to check whether they have done understood the topic or not. Regular drill of tables will be done in the class.

Feedback and remedial teaching

In a factors of tables will be given to the slow weak students so that they can do multiplication some teachers will start there with multiple click multiplication of 2, 3 digit by one way digit and then presses to the four five days the 10th of step multiplication

Inclusive practices and full participation without discrimination

- Working in pairs, groups or individually.
- Working on computer.
- Reading books.
- Creative writing.
- Short speech activities.
- Musical based activities.

Lesson 6 Time

Learning Outcomes

Knowledge objectives

Students will be able to read and write the time in two ways.

Understanding objectives

Students will be able to understand the 12hours and 24 hours clock format.

Application objectives

They will understand the importance and application of time concept in their daily life.

Skill objectives

Students will develop the skill to solve problems involving estimation of time.

Previous knowledge testing

Simple questions based on time will be asked from the students like:

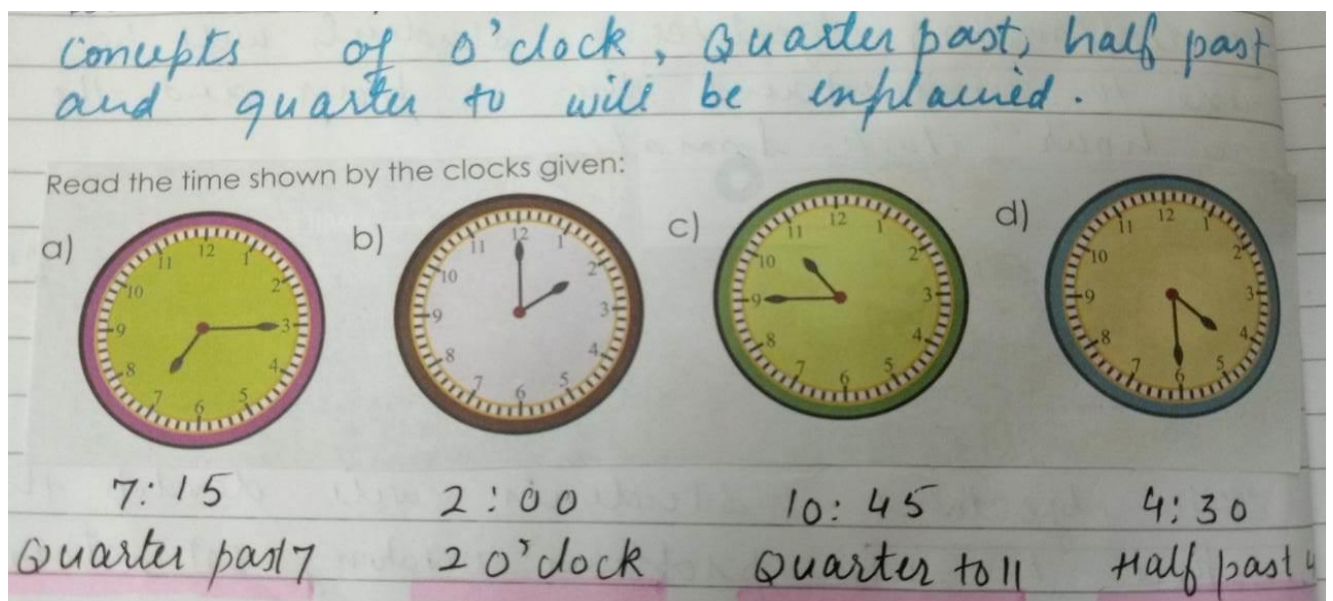
- Hours hand takes 2 rounds in a day.
- 1 hr = 60 min
- 2:30 can be read as half past 2
- Minute hand will be at 7 when it is 7:35
- 5:40 pm = ____ hrs

Teaching aids

Chalk, duster, green board, smart board, a wall clock, placards etc.

Pedagogical strategies

First of all teacher will explain different hands of a clock to the students by showing a wall clock. Relation between hr, minutes and seconds will be explained. After the time shown in a clock will be explained.



Concept of o'clock, quarter past, half past and quarter to will be explained.

After this conversion of 12 hr is 24 hr clock time and vice versa will be explained by giving example from day to day life.

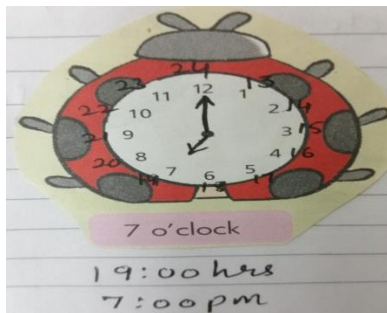
Eg. Time – table chart at railway station or airport .

Group activity

The class will be divided into two groups. One group will make placards of 12 hr clock time and another group will make placard of 24 hr clock time as directed by the teacher. Each child from 1st group will show his 12 hr placard and one child from another group will show placard of its 24 hrs clock time. If it is right then he/she will score 10. Otherwise 1st team will get bonus point of 10. After that another child of group 1 will show 12 hr. placard and one child from group 2 will show its 24 hr placard and so on.

Art intergration

Students will be asked to make a model of clock using a colourful sheet, cardboard, fevistick and a pair of scissors and express the time in 12 hour and 24 hour clock formats.



Iterdiscriplinary linkage and infusion of like skill

Teacher will tell the students about the importance of study of time in the study of other subjects like social sciences, sciences etc.

While studying the concept of time students will understand the importance of time in their daily life. They will learn to be punctual how to manage then time

Recapitulation –

To check their understanding few questions will be given to the students in the form of fill ups, MCQ, true/false etc.

Resources including ICT

Smart board, model of a clock, you tube, E-Books.

Assessment items

Students will be given a class test

- 1) 1 century = _____ years
- 2) 2:35 am = _____ hrs.(in 24 hrs.)
- 3) 16.50 hrs = _____ (in 12 hrs)

Feedback and remedial teaching

Model of a clock will be shown and children with slow learning will be given extra hard on experiences to understand the concept of time. Regular practice of 12/24 hrs conversion of time will be given.

Inclusive practices and full participation without discrimination

- Group activity
- Showing videos
- Charts
- Books
- Hand on activities
- Experiential learning

August 2023

Number of working days

Topic Lesson 7 Division

7.1 Divide large numbers

Learning Outcomes

Knowledge objectives

To make them acquainted with the properties of division.

Understanding objectives

Students will be understand the meaning of division and different terms related to division like dividend, division, quotient and remainder

Application objectives

Students will be able to apply the division concept in their daily life.

Skill objective

Students will develop the skill to divide and check large numbers.

Teaching Aids

Chalk, duster, green board, smart board.

Previous knowledge testing

Simple ques based on division will be asked

Eg. $138 \div 0 =$ _____


$0 \div 415 =$ _____

$9346 \div 100$ $q =$ _____ $R =$ _____

_____ $\div 1 = 685$

Pedagogical strategies

Teacher will introduce the topic by using smart class modules. First of all simple term related to division will be explained, after that division of large number by 10, 100, 1000..... etc and by 2 digit and 1 digit number will be explained along with their check by showing modules in smart class and also by solving few sums on the board. At last word problem will be explained by giving examples from daily life.



1. If a number is divided by 1, the quotient is the number itself.
Example : $41 \div 1 = 41$

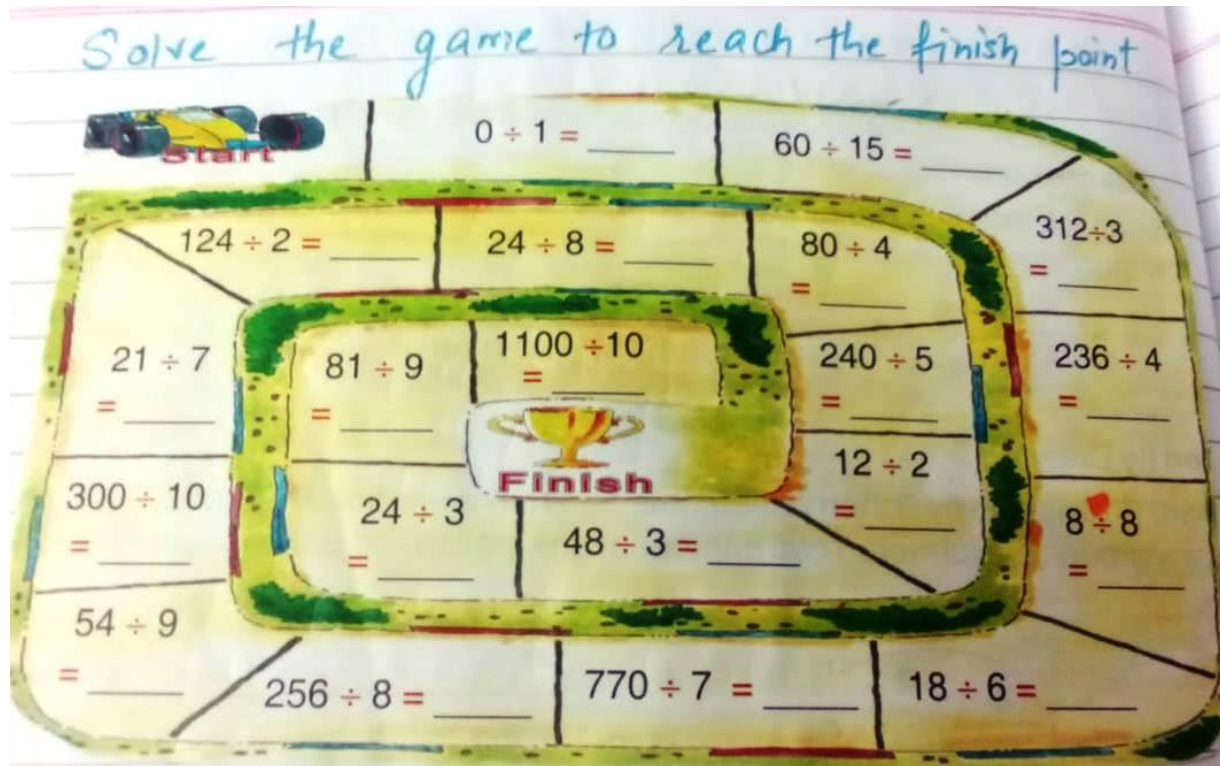
2. If a number, other than zero, is divided by itself, the quotient is 1.
Example : $2367 \div 2367 = 1$

3. If zero is divided by a number (other than zero), the quotient is zero.
Example : $0 \div 414 = 0$

4. **REMEMBER**
Every division fact has a division fact and multiplication fact to verify it.
Example : $12 \div 6 = 2$
Division fact = $12 \div 2 = 6$
Multiplication fact = $6 \times 2 = 12$

Group activity

Students will be divided into 2 groups and given one game to solve the group which solves it first will be the winner.



Art integration

Count the marbles into how many equal groups of 3 each can the marbles arranged.

If 18 sweets are equally divided into 6 plates, there are 3 sweets into each plate. This means that

- | | |
|----------------------|----------------------|
| a) $3 \times 6 = 18$ | c) $6 \times 3 = 18$ |
| b) $18 \div 6 = 3$ | d) $18 \div 3 = 6$ |

Interdisciplinary linkage and infusion of life skill

Recapitulation

Few questions based on division will be given to the students. Two practice sums will be given on regular basis.

Resources including ICT

Smart board, E-books, YouTube, electronic gadgets etc.

Assessment items

Students will be given small test including MCQ, fill-ups, true/false, or word problem to check their understanding.

Feedback and remedial teaching

Extra attention will be paid towards slow writers. Regular practice of tables will be given (specially 2 to 9) to these.

Inclusive practices and full participation without discrimination

- Group activities
- Showing videos
- Creative writing
- Sports based activities
- Musical based activities

October,2023

Number of working days

Topic

Lesson 8 Fraction I

- 8.1 Equivalent fractions
- 8.2 Identify and compare like fractions
- 8.3 Add and Subtract like fractions

Lesson 9 fraction II

- 9.1 fraction of a number
- 9.2 conversions of fractions

Learning Outcomes

Knowledge objectives

Students will be able to understand the meaning of fraction and terms related to it.

Understanding objectives

Students will understand equivalent fractions and different types of fractions, Addition/subtraction/comparison etc.

Application objectives

Students will understand the importance of fractions in their daily life.

Skill objective

Students will be able to compare, add and subtract different fractions.

Teaching Aids

Chalk, duster, black board, smart board, paper strips.

Previous knowledge testing

Simple questions will be asked from the students

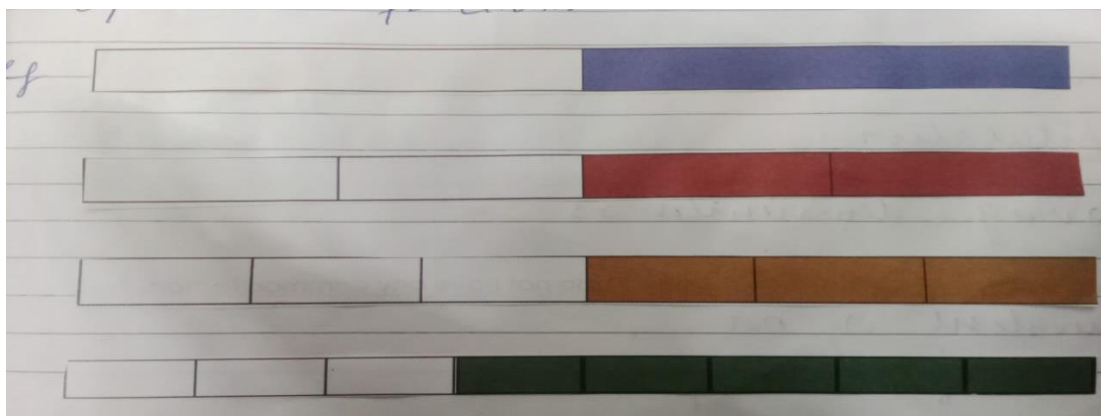
- $\frac{9}{16} = \frac{18}{\quad}$
- Put symbol $\frac{5}{9} = \frac{8}{9}$
- N= ____, D= _____ in $\frac{28}{30}$

Pedagogical strategies

Teachers will explain equivalent fractions and types of fractions by showing modules on smart board. Activity method will be used to explain add and subtract of fractions to the students.

Group activity

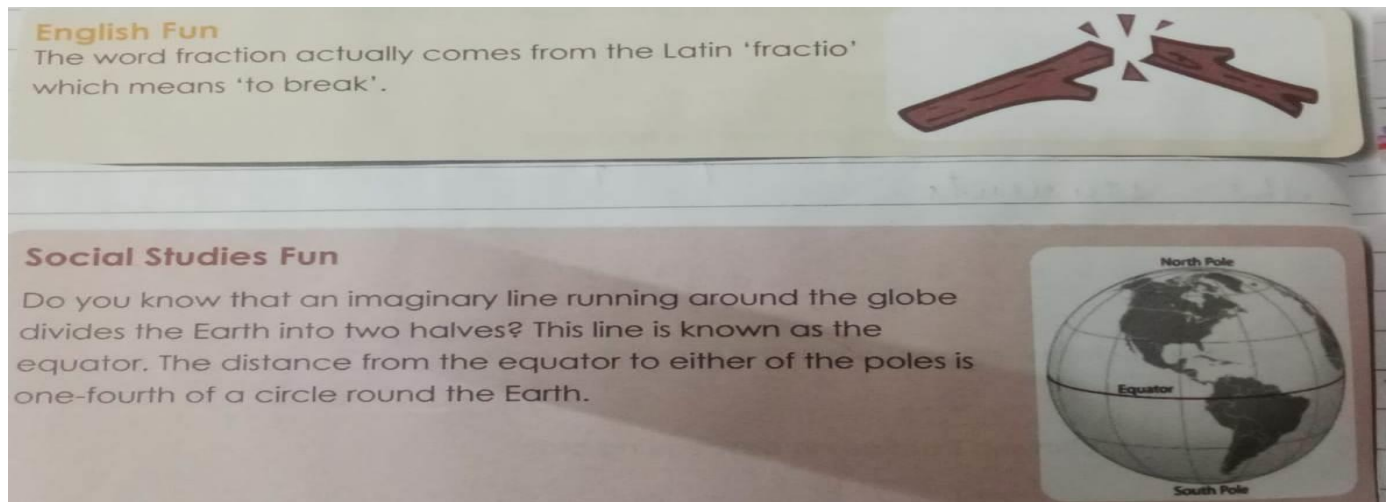
Students will be asked to divide a colourful paper strip in such a way that they show equivalent fractions.



Art integration

Draw cutout of 20 circles. Now given $\frac{1}{5}$ of them to your friend or partner so divided the circle into 5 equal groups and take away one group and give to your partner this give 5 groups with 4 circles in each group so $\frac{1}{5}$ of 20 is 4.

Interdisciplinary linkage and infusion of life skill



Recapitulation

- Find an equivalent fraction of $\frac{7}{11}$ having denominator 33.
- Check whether the given fractions are equivalent or not $\frac{5}{8}$ and $\frac{15}{24}$
- Add $\frac{3}{6} + \frac{1}{6}$
- Subtract $\frac{10}{25} - \frac{7}{25}$

Resources including ICT

Smart phones, E-books, YouTube, Electronic

Assessment items

Students will be given a short test including fillers MCQ short question to check their understanding.

Feedback and remedial teaching

Extra attention will be pay to answer (slow writers) they will be given hand on activities to understand the concept as slowly and easily.

Inclusive practices and full participation without discrimination

- Group activities
- Sports activities
- Musical base activities
- Charts
- Books and
- Calibration

November 2023

No. of working days -

Topic: lesson 10 Decimals

10-1 Conversions involving fractions

Learning Outcomes

Knowledge objectives

Students will be able to understand about the meaning of decimal and terms related to it.

Understanding objectives

Students will understand decimal system, expanding, decimal numbers with place value charts. Application objectives - students will use the concept of decimals in their daily life.

Application objectives

students will be able to convert fractions into decimals and vice versa Previous knowledge testing questions will Following asked from the Students be

1. Write the place value and face value of

236.075

Write in expanded form 1.34

Teaching Aids

Chalk, duster, green board, smart board, e-books. Etc.

Pedagogical strategies

To Teacher will explain write decimals in words and figures, place and face value, expanded and short form Conversions of decimals into Modulle will be used clear to the students.

Thousands	Hundreds	Tens	Ones	Decimal point	Tenths	Hundredths
1×1000	1×100	1×10	1	.	$\frac{1}{10}$	$\frac{1}{100}$
2	8	6	2	.	3	9

A decimal number has two parts.

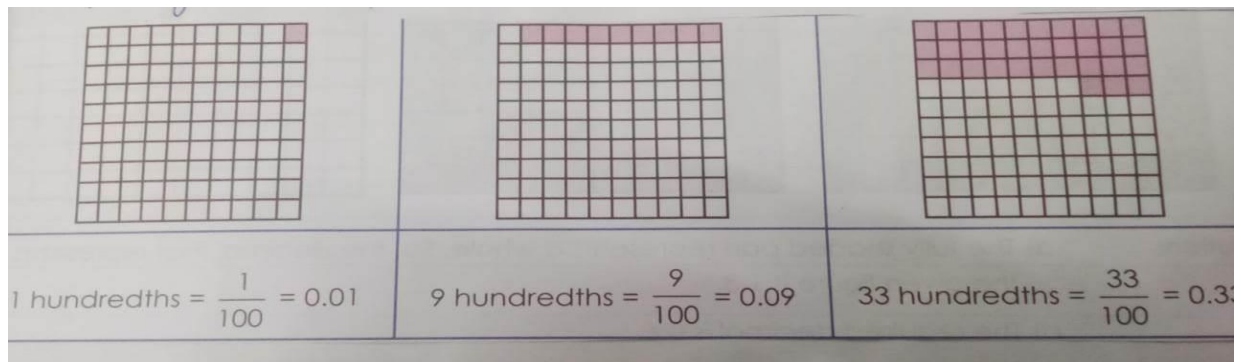
48 35

Whole or integral part ($=$ or > 0) Decimal part (< 1)

Decimal Point

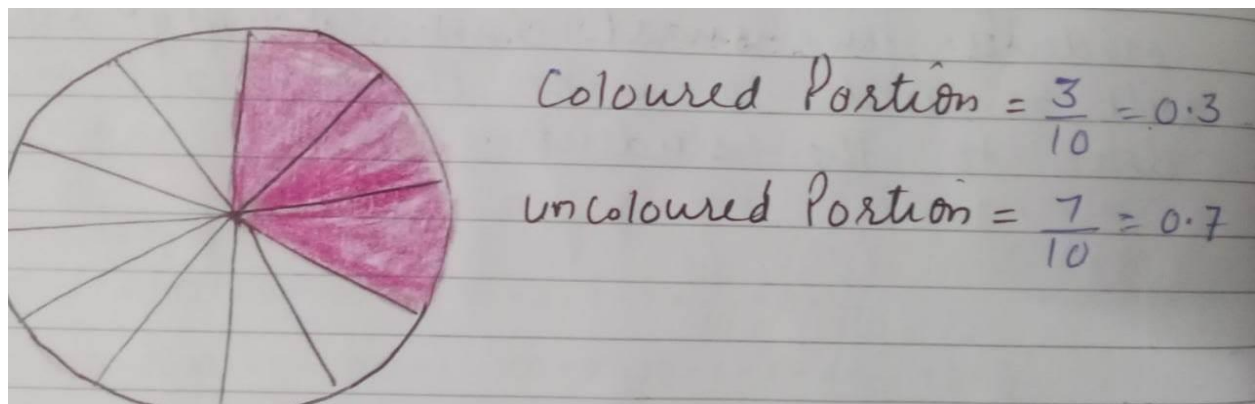
Group activity

Students will perform a group activity in which decimal numbers with the help activity in different of graph.



Art integration


Draw a circle with 10 equal parts colour three fractions red and 7 portions not coloured. Now we can write portion as 3 or 0.3 and portion that is not coloured can be written as 7 or 0.7.



Interdisciplinary linkage and infusion of life skill

English Fun
A word contains ten letters, out of which three are vowels. Write the fraction of the number of consonants. Express this in decimal form.

Social Studies Fun
The Earth takes 23 hours, 56 minutes and 4.09 seconds to complete a rotation. But, to make it easy to calculate time, we take this as 24 hours.



Recapitulation

- 1) Convert 3.68 into fraction.
- 2) Write in expanded form 56.37.
- 3) Write the place value and face value of 4 in 38.465.

Resources including ICT

online reference Material, <https://youtu.be/kfeFnLKySio>

Assessment items

students will be given short test which includes fill ups, true false, MCQ and short questions etc.

Feedback and remedial teaching

Model of decimal place value chart will be shown and children with slow learning will be given sufficient practice of the concept. Side by side cross questioning will be done to check their understanding.

Inclusive practices and full participation without discrimination

- Group activity
- Showing video
- Hand on activities
- Experiential learning
- Watching video

DECEMBER-2023

No. of working days -

Topic:

Lesson 11 Money

11.1 - Conversion of Rupees and paise

11.2 - Add & subtract money with conversion

11.3 - Multiply & divide Money

-

Learning Outcomes

Knowledge objectives

Students will be able to convert rupees to paise and vice versa

Understanding objectives

Students will be able to conversions solve the problems involving conversions of money.

Indian

Application objectives

Students will be able to use this concept in their daily life and understand the importance of Money.

Skill objective

They will be able to

- add and subtract money with column method.
- Multiply & divide money.

Previous knowledge testing

Following questions will be asked from the students

Rs 1 = _____ P

To convert rupees into paise, we _____ by 100.

Indian currency is _____ and _____.

Teaching Aids

Chalk, duster, green board, Smart board, artificial currency etc.

Pedagogical strategies

Teacher will explain meaning of currency and about Indian currency by giving examples. After that conversions, add/subtract and multiply/divide of money with conversions will be explained by showing modules on smart board and by using online reference material like YouTube, E-books etc or by activity method.

Group activity

students will perform a group activity in which they will buy a pencil, notebook and eraser etc by using artificial currency.

Art integration

Students will collect coins and notes of a different denomination and paste it on a sheet.

Interdisciplinary linkage and infusion of life skill

Recapitulation

Resources including ICT

Assessment items

Feedback and remedial teaching

Extra attention will be paid towards slow writers. They will be given hard on activities (will be shown currency notes and coins) so that they can understand the concept of their own peace.

Inclusive practices and full participation without discrimination

- Group activities
- Showing beach

- Experiential learning
- Hands on activities
- Short based activities

January- 2023

Number of working days -

Topic

Lesson 12 measurements

12.1 Multiply and divide lengths, weights and capacities

Learning Outcomes

Knowledge objectives

Students will learn about relation between units of learners weight and capacity.

Understanding objectives

Students will understand the current what smaller unit to larger units.

Application objectives

Students will understand the importance of measurement in their daily life.

Skill objective

Students will develop the scale to multiply and divide length, weight and capacity.

Teaching Aids

Chalk, duster, green board, small board, scale, beaker, weight.

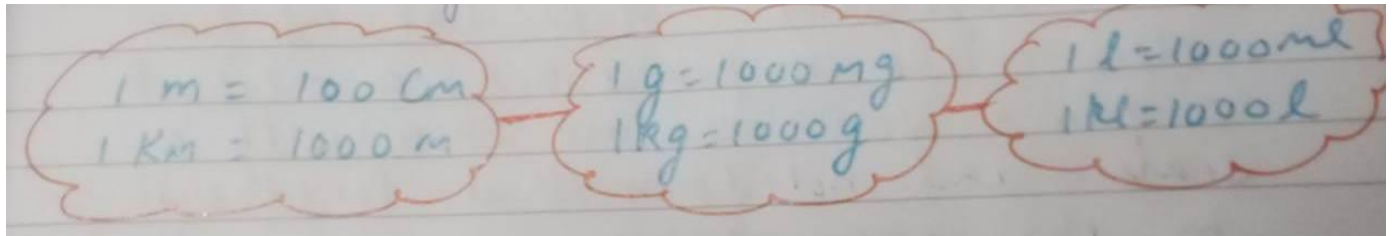
Previous knowledge testing

Following question will be asked from the students-

- $2 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$
- $5 \text{ l } 400 \text{ ml} = \underline{\hspace{2cm}} \text{ ml}$
- $240 \text{ m } 22 \text{ cm} - 22 \text{ m } 20 \text{ cm} = \underline{\hspace{3cm}}$
- $250 \text{ g} + 150 \text{ g} = \underline{\hspace{2cm}} \text{ g}$

Pedagogical strategies

Teacher will explain different concept related to the measurement by writing their relationship. After these, multiplication and division of measurement will be explained by showing modules on smart board. Students will be taken to the lab and different instruments will be shown to the students to give them real life experience. At last word problem of measurement will be explained by giving example from their daily life.



Group activity

Students will perform a group activity in which they will be asked to measure the length of their Maths book, weight of the year, school bag and capacity of their water bottle with metric masses system.

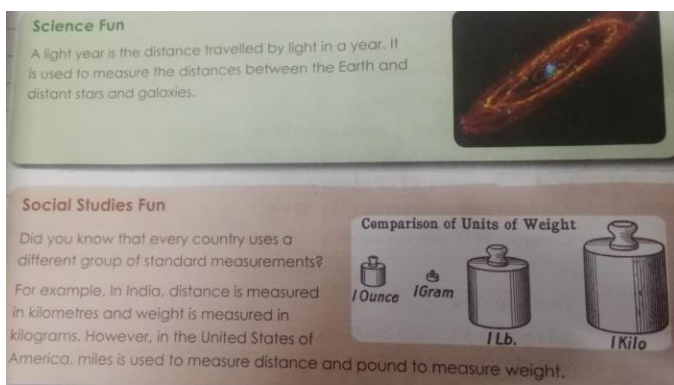
- BOOK : m , cm
- BAG : g , kg
- BOTTEL : ml , l

Art integration

Make list of few items like a pencil box, a notebook, a pen. Now measure these with the scale and note down their lens in centimeter. In the same way we can make list of objects and the units used to measure them.

Interdisciplinary linkage and infusion of life skill

Students will be able to use this concept in their daily life and in other subjects like drawing to draw different figures, in science to measure weight and capacity of different objects.



Recapitulation

Few question will be given to the students

- Convert 6g248mg into mg
- Multiply 85kg145g X 10
- Divide 17m85cm by 9

Resources including ICT

Smart board, E-books, online references material, YouTube

<https://youtube/dw-2fmmVPiw>

Assessment items

Students will be asked to do drill time 1 and 2 to check their understanding.

Feedback and remedial teaching

Extra attention will be paid towards slower writers. Regular practice of tables will be given so that they can do sums of multiply and divide easily.

Inclusive practices and full participation without discrimination

- Creating operationalities to listen to all students.
- Work as a team
- Manage classroom behavior
- Hand on activity
- Showing charts and videos
- Using discussion method

February-2023

No. of working days -

Topic:

Lesson 13 Data Handling

13.1 Bar Graphs

Learning Outcomes

Knowledge objectives

To make them acquainted with the knowledge of pictograph and bar graph.

Understanding objectives

Students will understand the meaning and purpose of pictograph and bar graphs.

Application objectives

They will understand the use of pictograph and bar graph in their daily life.

Skill objective

They will develop the skill to read and interpret bar graphs and drawing bar graph based on the given data.

Teaching Aids

Chalk, , duster, green board, smart board, graph papers, stickers etc.

Previous knowledge testing

Following questions will be asked from the students.

- What is pictograph?
- What is data?
- What is the meaning of a bar graph?

Pedagogical strategies

Teachers will explain the meaning of data and different ways to represent data ie bar graph and pictograph. Difference between bar graph and pictograph will

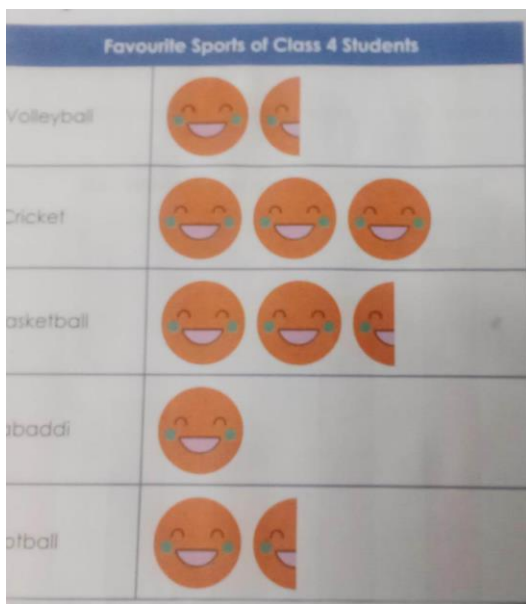
also be explained by showing modules on smart board and by doing activities in the classroom or in Maths lab.

Group activity

Students will perform a group activity in which they will be asked to collect data about favourite sports of the students of their class and represent this data in the form of pictograph as well as bar graph.

Art integration

Draw one horizontal and another vertical line called the ones. They meet at a point called origin. Take a suitable scale such as 1cm = 5 units. On the x-axis show the items of data and on the y-axis show their values. Draw bars of equal width on the x-axis. The height of the rectangle represents the value of the data which are given on y-axis. Give a relevant title to the bar graphs.



Interdisciplinary linkage and infusion of life skill

Students will be able to use this concept in their daily life and in other subjects like English and social studies to make graphs.

Social Studies Fun
The population of different states can be compared using a bar graph.

English Fun
Make a list of your favourite authors. Count the number of books that you know of each author. Using this data, draw a bar graph. (Some names of authors for reference: J K Rowling, Ruskin Bond, C S Lewis, Charles Dickens, R K Narayan and so on.)

Recapitulation

Few questions of graphs (bar and pictographs) will be given to the students.

Resources including ICT

Smart board, E-books, online reference material, youtube etc.

Assessment items

To assess their knowledge students will be given a revision worksheet. Five practice question will be given on regular basis.

Feedback and remedial teaching

Extra attention will be paid on slow writers. They will be engaged in hand on activities , so that they can learn by their personal experiences.

Inclusive practices and full participation without discrimination

- Group activities
- Showing beach
- Experiential learning
- Hands on activities
- Short based activities
- Collaboration