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Number of teaching days of month -25 days

Topic :Integers

Days required to complete the topic -15 days

PK Testing

1. Define whole numbers.
2. How many integers lie between -3 and 3
3. The successor of -19 is ____

Specific Learning outcomes

Students will be able to

1. Define the set of integers, positive numbers, negative numbers, opposite.
2. List real life situations involving opposite.
3. Identify an integer to represent a given real life situation.
4. Indicate an integer on a number line.

Vocabulary and important spellings

Positive words: Deposit, increases, forward, ascending, gained, above

Negative words: Withdrawal, decrease, backward, descending, loss, below

Closure, commutative, associative, include.

Pedagogical strategies

Innovative methods used to explain the Topic

Art Integration

Song

Same sign keep and Add

Different sign subtract

Keep the sign of bigger Number

Then answer will be Exact

Teacher will also explain them the method to add and subtract integers on number line and also tell them the rules to multiply and divide the integers that is product of the even numbers of the negative integers is positive the product of the odd numbers of negative integers will be negative after this teacher will explain them a game given in the book page number 12, 13.

Interdisciplinary linkages and infusion of life skills

Develop logical thinking.

Collaboration and teamwork

Resources including ICT

1. NCERT Book
2. Worksheet Books(**Thinker active**)
3. PPT.

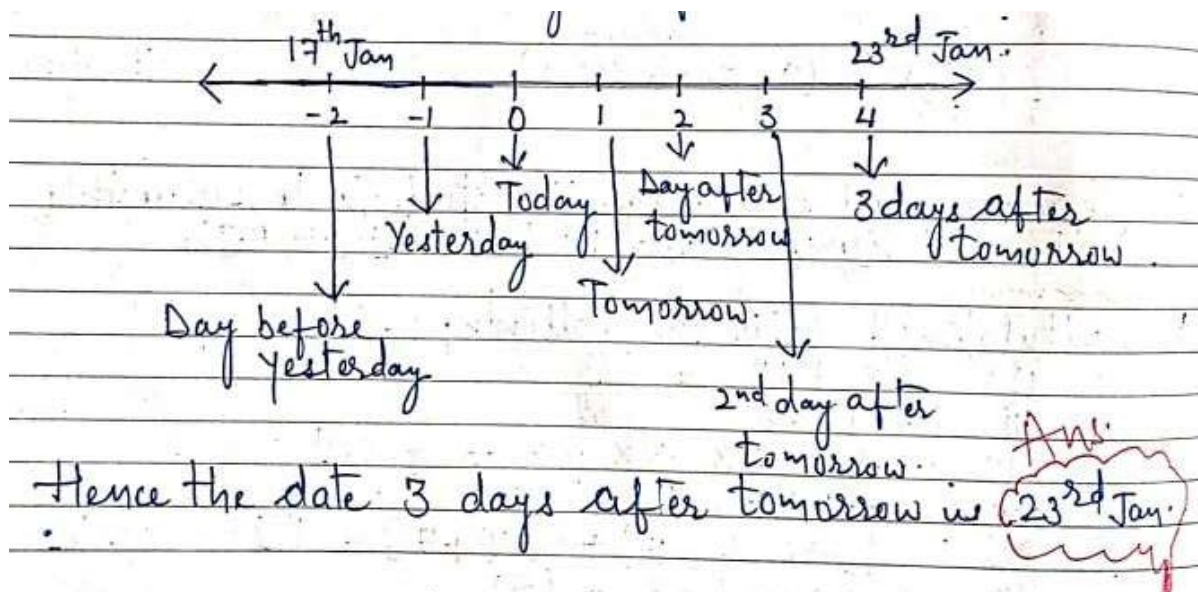
Assessment item

Assignment

Students will be asked to complete given assignments that is worksheet book which contains MCQ true false hard questions value based and few important sums based upon daily life will be discussed.

Example

Taking today as zero on the number line if the day before yesterday is 17 January what is the date 3 days after tomorrow answer the date 3 days after tomorrow is 23rd January.



Feedback and remedial teaching

Recapitulation

Solve the following

- (1) $-8 + 15 =$ _____
- (2) $-7 - 6 =$ _____
- (3) $-1 \times -2 \times -3 \times 4 \times 5 =$ _____
- (4) 2 exceed $-3 =$ _____

- 1) weak student will be given an extra attention
- 2) they are provided with extra worksheet

Inclusive practice and full participation without discrimination

Co scholastic activity

GAME

1. Take a Board marks from -104 to 104 as shown
2. Take a bag containing two blue and two red dice.
3. Number of dots on the blue dice indicate positive integers and the number of dots on the red dice indicate negative integers.
4. Every player will place his or her counter at zero .
5. Each player will take out to dice at a time from the bag and through them .
6. After every through the player has to multiply the number marked on the dice.
7. If the product is a positive integer then the players will move his counter toward 104
8. If the product is a negative integers then the player will move counter toward -104
9. The players who reaches either- 104 or 104 first is the Winner.

A hand-drawn board game grid with numbers from 104 to -104. The grid is 11 columns wide and 21 rows high. The numbers are arranged in a sequence from 104 in the top-left corner to -104 in the bottom-right corner. The grid is drawn with a green border and has a slightly irregular, hand-drawn appearance. The numbers are written in black ink on a white background.

104	103	102	101	100	99	98	97	96	95	94
83	84	85	86	87	88	89	90	91	92	93
82	81	80	79	78	77	76	75	74	73	72
61	62	63	64	65	66	67	68	69	70	71
60	59	58	57	56	55	54	53	52	51	50
39	40	41	42	43	44	45	46	47	48	49
38	37	36	35	34	33	32	31	30	29	28
17	18	19	20	21	22	23	24	25	26	27
16	15	14	13	12	11	10	9	8	7	6
-5	-4	-3	-2	-1	0	1	2	3	4	5
-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16
-27	-26	-25	-24	-23	-22	-21	-20	-19	-18	-17
-28	-29	-30	-31	-32	-33	-34	-35	-36	-37	-38
-49	-48	-47	-46	-45	-44	-43	-42	-41	-40	-39
-50	-51	-52	-53	-54	-55	-56	-57	-58	-59	-60
-71	-70	-69	-68	-67	-66	-65	-64	-63	-62	-61
-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82
-93	-92	-91	-90	-89	-88	-87	-86	-85	-84	-83
-94	-95	-96	-97	-98	-99	-100	-101	-102	-103	-104

Procedure

The teacher will introduce the topic with the definition of integers that is positive and negative numbers along with zero are called integers. positive numbers lie on the right hand side of zero on the number line and the negative integers lie on the left hand side of the number line teacher will explain same topic with the help of the black board

Properties

1. **Closure Property:** If a & b are integers then $a + b$, $a - b$, $a \times b$ are again integers.
2. **Commutative Property:** $a + b = b + a$
 $a \times b = b \times a$
3. **Associative Property:** $(a + b) + c = a + (b + c)$
4. **Distributive Property:** $a \times (b + c) = (a \times b) + (a \times c)$

Innovative Pedagogies

To check the concept of addition and subtraction teacher will give them a worksheet based upon matching teacher will and carry the students to solve this activity and sums given in the book bracket NCERT.

(a) $7 + 0 + (-3) + 4 + (-5)$
 $3 + (-3) + 1 + (-1)$
 $4 + (-2) + 0$
 $2 + (-2)$
 0
(a) Ans = zero

(b) $8 + (-3) + (-1) + (-7) + 4$
 $5 + (-4) + (-8) + (-1)$
 $1 + (-2) + 9$
 $(-1) + (-3)$
 42
(b) Ans = -42

Topic:- SYMMETRY

Number of days required to complete the topic :- 3 to 4 days

P.K. Testing :-

- 1) Give two examples of two dimensional figures and three-dimensional figures.
- 2) What is the difference between 2D shapes and 3D shapes.

Vocabulary used:- Intersection, axis of symmetry regular hexagon, rotational symmetry.

Important Spellings :- Intersection, axis, Rotational, Reflection.

Specific Learning outcomes :- By the end of this chapter students will be able to understand.

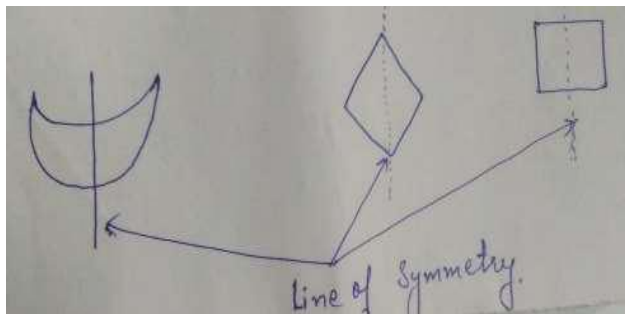
1. Name and recognise the three different types of symmetry, reflection, rotational and line of symmetry.
2. Students will be able to understand the different symmetry figures.

Pedagogical strategies

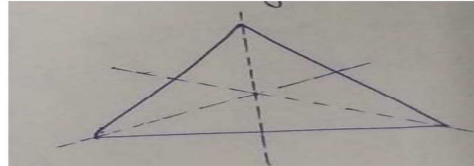
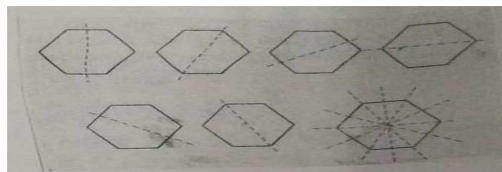
Explanation with Innovative methods

Take a blank sheet of paper, fold it in two halves and open it again. Spread some wet paint on one half, fold it back again and then press it slightly. Now when we unfold the paper slightly, a miraculously beautiful, Symmetric design appears on both sides of papers.

Procedure :- Teacher will explain the topic with introducing the definition with the help of Black Board. Symmetry is abundant in nature. When we see certain figures with evenly balanced proportion. We say that they are symmetrical. If we fold a picture in half such that left half and right half match exactly then such type of picture is called a symmetrical picture and the line that divides the picture into two parts is called the line of symmetry or axis of symmetry. This folding line is also called a line of symmetry.



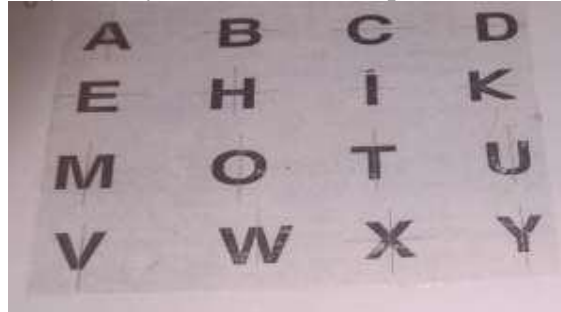
Line of Symmetry



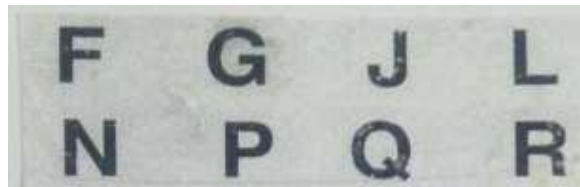
An equilateral triangle has three lines of symmetry.

Students Participation :- Teacher will explain the concepts with diagrams. Now students will actively participate in class for making the line of symmetry of alphabets

Symmetry of letters of the Alphabet :-

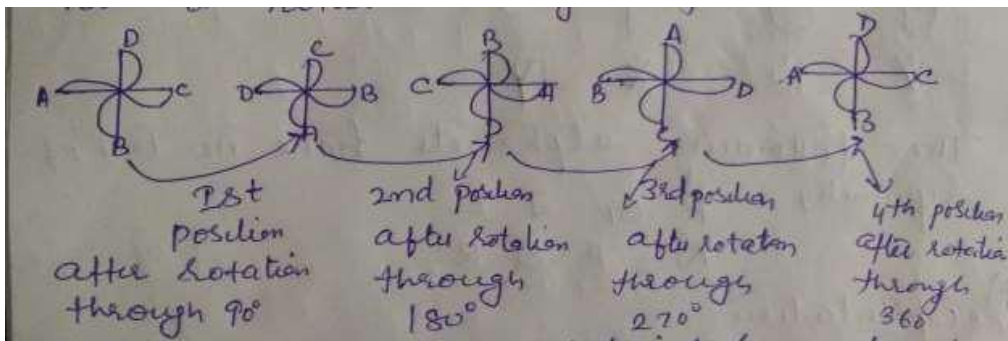


The following alphabets have no line of symmetry.



Art Integration with other domain :-

Make a paper windmill like the one shown in figure. If we rotate it through 90° about a fixed point the windmill will look exactly the same. We say that windmill has a rotational symmetry



We say it has rotational symmetry of order 4

Interdisciplinary linkages and infusion of life skills

- 1) Develop logical thinking .
- 2) collaboration and teamwork

Resources including ICT

Lab manual activities , PPT, daily life activities on symmetry

Assessment :-

- Q1. Give two examples of symmetrical figures in daily life
- Q2. Give an examples of triangle having one line of symmetry, two lines of symmetry, no line of symmetry.
- Q3. Write an alphabets having
- a) vertical line of symmetry
 - b) Horizontal line of symmetry
 - c) No line of symmetry

Feedback and remedial teaching

Teacher will ask the following questions.

- Q1. What is the difference between line symmetry and rotational symmetry.
- Q2. Name the alphabets which have no line of symmetry.
- Q3. Write the no. of line of symmetry of hermetical figure
- a) Square b) Rectangle c) Rhombus d) Regular Hexagon e) circle f) parallelogram

weak students will be given an extra attention , they are provided with extra worksheet.

Inclusive practice and full participation without discrimination

Co-Scholastic Activities :-

Symmetry dance play some music. Let two children of same height hold one hand in the centre and perform dances moves like sharing hands in a similar manner in the opp. directions. guide children how to create symmetry postures on both the sides

TOPIC	LEARNING OUTCOMES	INNOVATIVE /ART INTEGRATION/EXPERIENTIAL LEARNING /INTER-DISCIPLINARY
FRACTIONS AND DECIMAL	<p>1.The students will be able to define decimal,mixed number,whole number,fraction,place value ,add,subtract,multiply,and divide fraction and decimal.</p> <p>2.Identify the whole number and fractional parts of a decimal.</p> <p>3. Identify the purpose of using decimals.</p> <p>4. Recognize connection between decimal number and fraction .</p>	<p>1.By using paper folding method .</p> <p>2. Fraction rangoli or patterns will be explained .</p> <p>3. Relationship between fraction and decimal will be explained by taking two circles of same radius.</p>

The idea of fraction and decimal was given by the Flemish mathematician simon stevin in 1586.

Number of teaching days of month – 19 days

Topic :Fractions and decimals

Days required to complete the topic - 15

PK Testing

- 1 Draw a fraction which represent half.
- 2 How can we write three fourth?
- 3 How can we write hundredths?
- 4 Write the decimal form of two upon thousand .

Specific Learning Outcomes

The students will be able to define decimal, mixed number ,whole number, fraction, place value,add,sub,multiply and divide fractions and decimals.Identify the whole number and fractional parts of a decimal. Identify the purpose of using decimals
Recognise connection between decimal numbers and place value.

Pedagogical strategies -

Innovative methods used to explain the Topic

Paper folding method will be used. Teacher will cut a circle of any radius on a drawing sheet and divide this into four equal parts by paper folding method and shade 1 part out of 4 with any colour and tell them about concept of 1 by 2, 1 by 4.

Art Integration

Fraction Rangoli or Patterns

Teacher will encourage students to create a pattern with different coloured papers by cutting them into 1 by 4, 1 by 2, 1 by 8 of the original size of paper

After this she will engage students in discussion about any nicknames they may have and ask the students if calling someone by nickname changed the person and she will relate fractions to decimals by making a comparison to the nicknames and explain them that fraction and decimal are different names for the same value example

1 by 10 is equal to 0.1

$$1/10 + 1/10 = 2/10$$

$$= 0.2$$

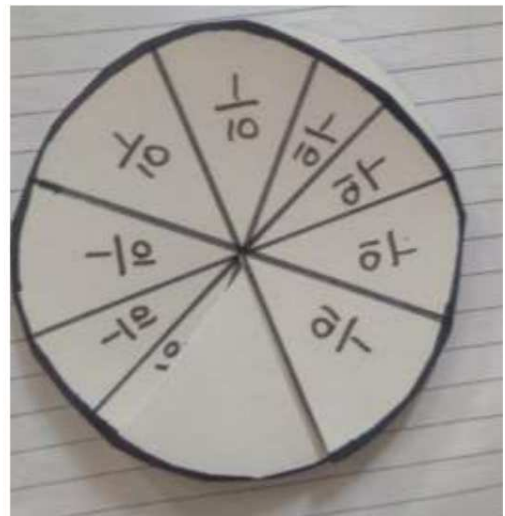
She will explain the concept by means of an activity she will call two students and say them to cut two circles of 10 cm radii each. students will divide the Circus into 10 equal parts and instruct them to write 1 by 10 on each part of the circle and 0.1 on each part of another circle when they interlock both the circles as shown then they will come to know about the relationship between fractions and decimals that is

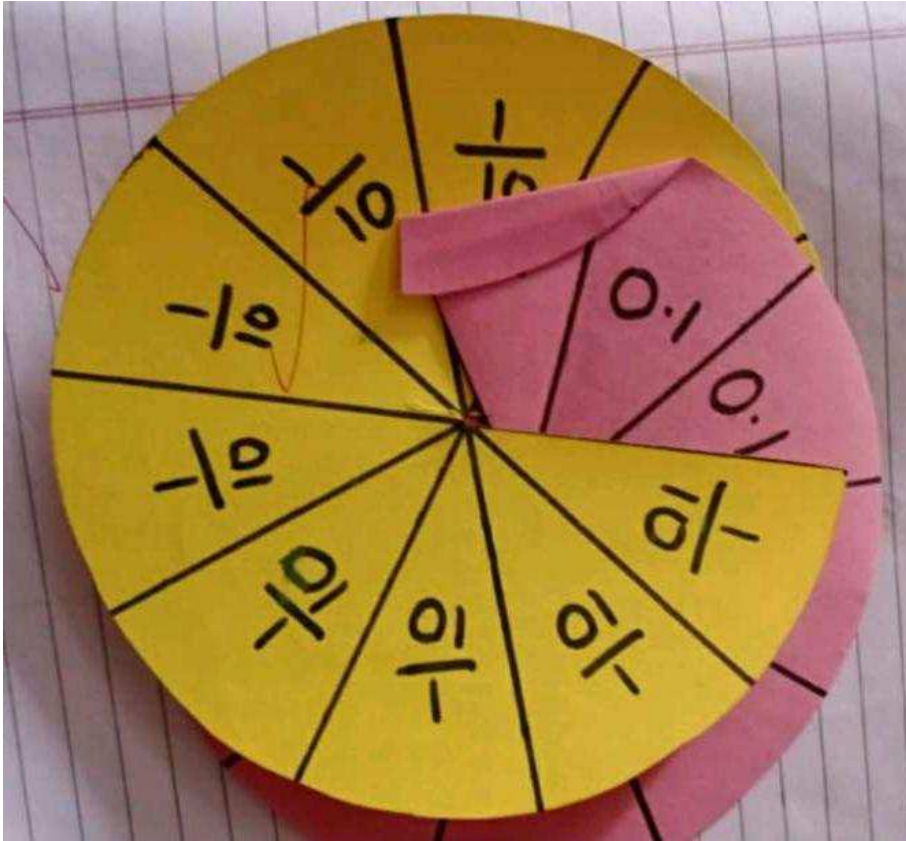
$$1/10 + 1/10 + 1/10 + 1/10 + 1/10 = 5/10$$

$$= 0.5$$

$$0.1 + 0.1 + 0.1 + 0.1 + 0.1$$

$$= 0.5$$





Procedure

Fraction is a part of a whole.

Fraction = Numerator

Denominator

It has many types improper fraction, proper fraction, mixed fraction, like fraction, unlike fraction, equivalent fractions. addition and subtraction of like fractions. To add or subtract two like fractions we add or subtract numerators and denominator will remain the same.

To add or subtract unlike fractions convert them into like and then add or subtract. Multiplication and division of fractions will be explained with the help of examples and activities. With the help of place value chart reading and writing of decimals will be explained content will be shown on the black board also method to write the place value expanded form multiplication and division of decimals will be explained

Maths Lab Activity-1

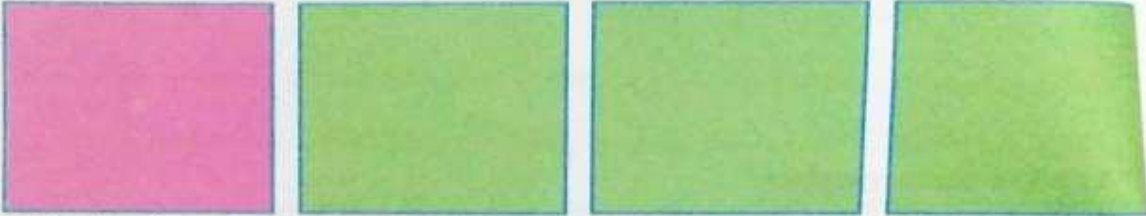
Objective : Multiplying a fraction and a whole number.

Materials Required : Some thick sheets of paper, sketch pen, scissors, pen, pencil, etc.

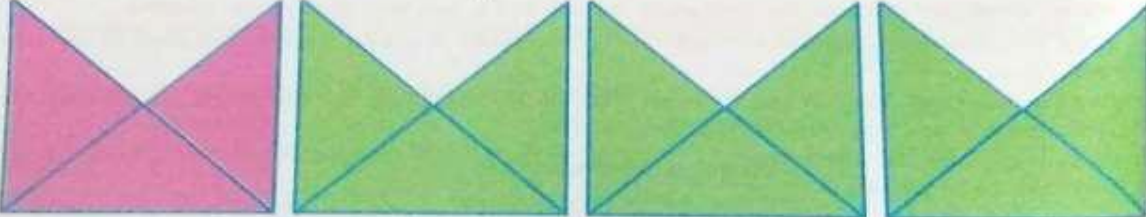
I. To find $4 \times \frac{3}{4}$

Procedure :

1. On a thick sheet of paper, draw 4 congruent squares. Using scissors, cut out these square pieces.



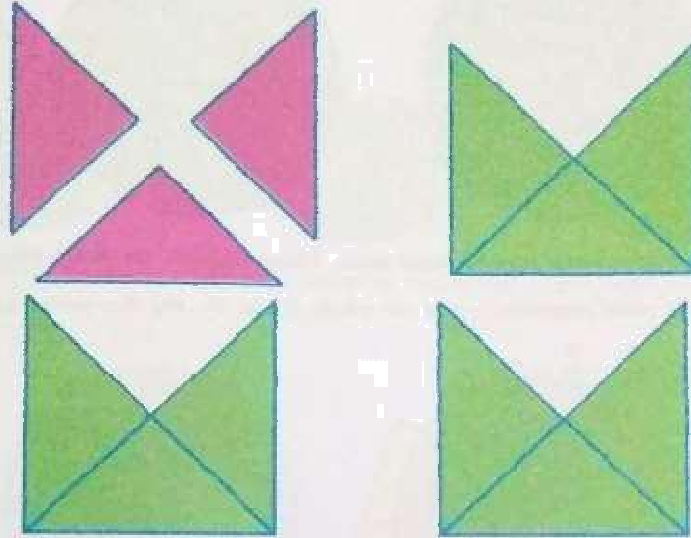
2. Join the opposite vertices of each square to get the diagonals of the squares. The diagonals of each square divide the square into 4 equal parts. Using scissors, cut out one part of each square. Each remaining piece represents $\frac{3}{4}$ of the whole square.



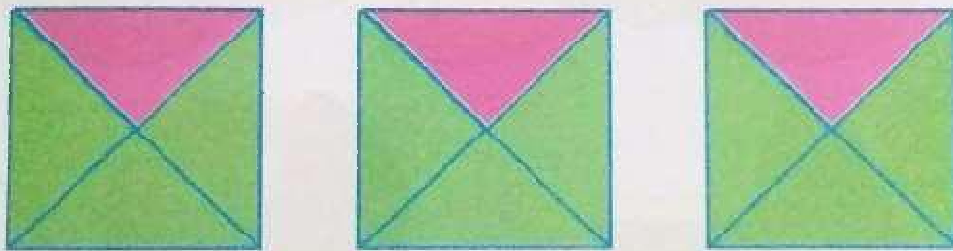
3. We know that multiplication is repeated addition of the same number. So, the four pieces shown above represent,
$$\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4} = 4 \times \frac{3}{4}$$

16

4. Take one of the pieces and using scissors, cut it out into three equal parts. Leave the remaining three pieces as such.



5. Now, rearrange the six pieces to get three complete squares as shown below.



Thus, $4 \times \frac{3}{4} = 3$

Interdisciplinary linkages and infusion of life skills - 1. Develop logical thinking

2. Collaboration and team work .

Resources

1. NCERT Book
2. Worksheet Books(Edu Hub Publications)
3. PPT.

Assessment items –

Q.1 Find $\frac{1}{8}$ of $\frac{24}{7}$.

Q.2 Arrange in descending order $\frac{1}{5}$, $\frac{3}{2}$, $\frac{5}{3}$.

Q.3 Find (a) 2.873×100

(b) 2.7×0.82

(c) $1.4 \div 10$

(d) $96.2 \div 0.26$

Q.4 Write $378/125$ as decimal numbers

Feedback and remedial teaching

Recapitulation

1. Convert the following into mixed fractions $37/5, 77/8$.
2. Arrange in ascending and descending order $5/12, 3/4, 7/8, 3/24$
3. Subtract $7/9$ from $15/8$
4. Add $19.8, 7.26, 0.074, 2.37$
5. Find the product 4.26×0.08 and 32.5×1000
6. Divide 0.068 by 0.04 and $30.25/100$

Inclusive practice and full participation without discrimination - Participation of student

CO-SCHOLASTIC ACTIVITY:-

Participation of students – To check concept of fraction by giving them an activity in 3 parts and fill the answers in the given table.

R	O	O	Y				
R	O	O	Y				
R	O	O	Y				
R	O	O	Y				
R	O	O					
R	O	O					
R	O	Y					
R	O	Y					
R	O	Y					
R	O	Y					

R – RED COLOUR O – ORANGE Y – YELLOW

Teacher will encourage the students to solve this activity.

COLOUR	FRACTION	LOWEST
RED	$10/100$	$1/10$
ORANGE	$15/100$	$3/20$
YELLOW	$8/100$	$2/25$
RED + ORANGE	$10/100 + 15/100 = 25/100$	$1/4$

Teacher will encourage the students to solve the sums given in the exercises of NCERT book and assignments given in the worksheet book.

Topic : Visualising Solid Shapes

Days required to complete the topic - 2

P.K. Testing :- Teacher will ask to create any shape out of craft sheet and to find its vertices, edges and faces.

Vocabulary / Important spellings :-

One dimensional, Two dimensional and three dimensional figures, oblique sketches, Isometric sketches

Important Spelling :-

Quadrilateral, vertices, faces edges, pyramid, Prism.

Specific Learning Outcomes :- After this lesson, students will be able to

- (i) Explain what is meant by dimensions of figures
- (ii) Specify dimensions of bounded figures rotations or reflections.

Able to describe vertices, edges, faces of figures

Explanation with innovative method :- Brief Introduction of Chapter will be given i.e.

Two dimensional figures :- The figures which can be drawn on a plane or surface are called 2-D shapes e.g. :- square, rectangle, triangle, quadrilateral circle etc.

Three dimensional figures :- 3-D shapes have volume and they occupy space. eg:- Cuboid, Cube, Con, Sphere, Pyramid etc.

- (i) Solid shapes have vertices, edges and faces;
- (ii) A net is a two dimensional shape which is used to form a solid. A same solid can have many types of nets.
- (iii) Two types of sketches are possible.

a. An oblique sketch : It does not have proportional length but appears as solid

b. An Isometric sketch : In this sketch measurement is kept proportional.

Pedagogical strategies

ACTIVITY

Art Integration :

- (i) Teacher will encourage the students to make various solid shapes by using waste material, card board, colored sheets etc and write their faces, edges and vertices
- (ii) To make the concept of 2D and 3D more clear a video will be shown (<https://youtube/PtE65ytx4DA>)

After this teacher will explain the slicing of different 3D shapes with the help of link i.e. (<https://youtube/hlD-j3AtxGs>)

Interdisciplinary linkages and infusion of life skills

- (i) develop logical thinking
- (ii) collaboration and team work

Resources including ICT :-

- (i) Mathematics Text book class VII (NCERT)
- (ii) PPT (Youtube Videos)

Assessment items

Daily assignment from the text book and work sheet and c-
Test will be conducted

Feedback and remedial teaching

- (i) A point where surfaces meet is called _____
- (ii) A point where surfaces meet is called _____
- (iii) A cube has _____ vertices _____ edges and _____ faces.
- (iv) A square prism has _____ base.
- (v) A solid figure which has no vertex and no edge is called a

Question : Three cubes of side 3 cm are joined to each other in a row.

- (i) What shape will you get?
- (ii) Write its dimensions
- (iii) The new shape on joining is seen from top and side.
Draw rough sketch when.
 - a. Seen from top
 - b. Seen from side

Question : What cross-sections do you get when you give a

- (i) Vertical Cut (ii) horizontal cut
- (a) Cuboid
 - (b) Sphere
 - (c) A die
 - (d) A circular pipe
 - (e) An ice cream cone

Inclusive practice and full participation without discrimination

Co-Scholastic activities :-

- (i) Make clay (or Plasticine) models of the Cuboid, Cylinder, Sphere, Cone Pyramid etc and make vertical and horizontal cuts.
- (ii) Draw rough sketch of the Cross-sections you obtain.

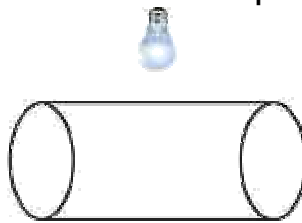
Students Participation :-

Shadow play activity based questions are given for solution eg:

- (i) Keep a torch light, right in front of cone. What type of shadow does it cast on the screen?
- (ii) Name the shapes of shadows obtain each when bulb is kept burning just above these shapes



(a) A Ball

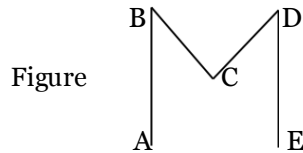


(b) A cylindrical pipe

Topic :- Lines and Angles

Previous Knowledge Testing:-

- (i) What is a line segment, line and a ray.
- (ii) Identify the different line segments and angle formed in given figure



- (iii) What are acute, obtuse and right angles?

Vocabulary used: - Complementary, supplementary adjacent, vertically, transversal, corresponding parallel and alternate.

Important Spellings: - Adjacent, corresponding, alternate and parallel.

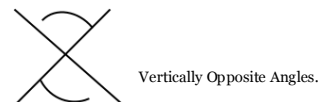
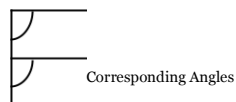
Specific Learning outcome: - (i) Identify lines, line segments, rays, and angles.

- (ii) Classify angles as acute, right, obtuse or straight.
- (iii) Identify complementary and supplementary angles.
- (iv) Find measures of angles.

Pedagogical strategies

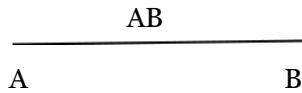
Aids/Innovative Methods used to explain the topic: -

Teacher will explain the concept of corresponding angles, alternate interior angle and vertically opposite angle with the help of English alphabets.

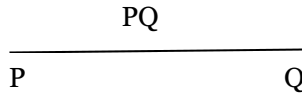


Procedure: - Teacher will introduce the topic with the help of definition

Line segment: - A line segment has two end points



A line: - A line can extend the two end points in either direction endlessly



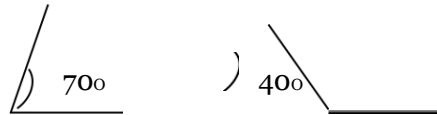
Complementary angles: - When the sum of measures of two angles is 90° , the angles are called complimentary.

Example

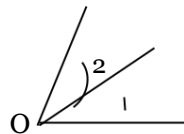


Supplementary angles: - When the sum of measure of two angles is 180° , the angles are called supplementary

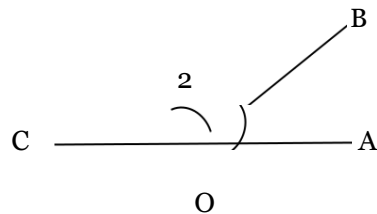
Example



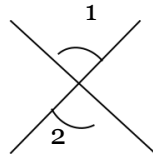
Adjacent angel:- Adjacent angles have a common vertex and and a common arm but no common interior points.



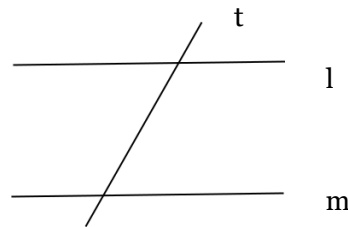
Linear pair: - A linear pair is a pair of adjacent angles whose non-common sides are opposite rays



Vertically opposite angles: - When two lines intersect, the angles on the opposite side of intersection point are called vertically opposite angles and they are always equal.

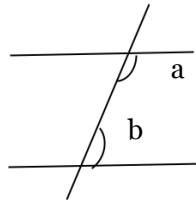


Transversal:- A line that intersect two or more lines at distinct points is called a transversal



If lines are parallel, corresponding angles are equal and alternate interior/exterior angles also equal.

Moreover, if lines are parallel, each pair of interior angles on the same side of the transversal are supplementary i.e.



Interdisciplinary linkages and infusion of life skills;- (i) develop logical thinking

(ii)collaboration and team work

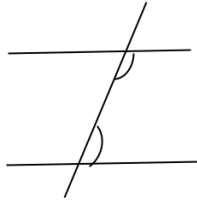
Resources including ICT

- (i) NCERT
- (ii) Thinker active
- (iii) Smart class content

Assessment items

- (i) The complement of the angle measuring 25 degree is.....
- (ii) The supplement of the angle measuring 100 degree is

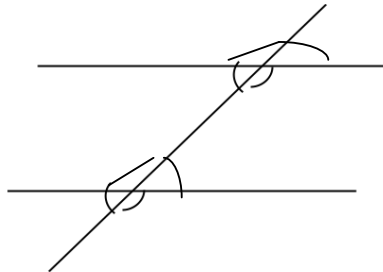
- (iii) Two angle, 1 and 2 form a linear pair . if we increase the measure of angle 1 the measure of angle will
- (iv) Angle a and Angle b in the given fig. form a pair of



Feedback and remedial teaching

Recapitulation: - (i) Find the complement angle of 35°

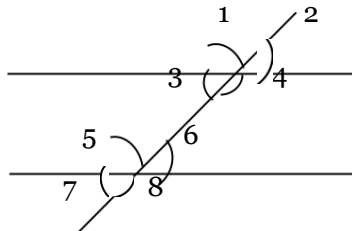
(ii) Identify the pairs of corresponding angles, pair of alternate interior angles, and vertically opposite angles.



Inclusive practice and full participation without discrimination

- (i) find examples from your surrounding where line intersect at right angle
- (ii) Try to identify a few transversal in your surrounding.

(iii) In the given figure, identify the interior angles, exterior angles, pair of corresponding angles, pair of alternate interior angles, alternate exterior angles and pair of interior angles on the same side of the transversal



Topic: - Algebraic Expression

Days required to complete the chapter :- 10 days

Previous knowledge Testing: -(i) What is an algebraic expression?

(ii) Give few examples of algebraic expression.

Vocabulary used: - Variable, constant, co-efficient, algebraic, expression, polynomial, numerical

Important Spellings: Coefficients, algebra, polynomial.

Specific Learning outcomes:- At the end of the session, the students must able to

- Identify the steps in evaluating algebraic expressions.
- Apply the steps in evaluating algebraic expressions.

Pedagogical strategies:-

Aids/Innovative methods used to explain the topic: variables and terms with the help of an example i.e.

First of all teacher will explain

On Sonali's birthday her mother has organized a birthday party. She told her that she will give 3 sweets to each of her friend. Sonali is very excited she decides to find out how many sweets will be needed for distribution .

No. of Friends	1	2	3	4
No. of Sweets	3	3+3= 6	3+3+3=9	3+3+3+3= 12

No. of sweets = 3 x No. of Friends

No. of Sweets = 3 x n = 3n

The letter n is called variable, 3 is a constant.

Procedure: - Teacher will introduce the definition of variable, constant and then explain the definition of algebraic expression.

Variable: - The letters x, y, l, m _ _ _ _ etc to denote variable. A variable can take various values, Its value is not fixed.

Constant: - A constant has a fixed value example 4, 100, _ _ _ etc.

Algebraic Expression: - They are formed from variables and constants. We use the operations of +, -, \times and \div on the variables and constants to form expressions example $4xy + 7$, $3x+1$.

- Expressions are made up of terms. Terms are added to make an expression

example.

In $7xy + 4$ expression, $7xy$ & 4 are the terms

- A term is a product of factors example $4xy$ is the product of factors $4, x$ and y In $4xy$ term $4, x$ & y are the factors
- Coefficient is the numerical factor in the term. Sometimes any factor in a term is called coefficient of the remaining part of the term
- Any expression with one or more terms is called a polynomial

(i) One term expression is called a monomial.

(ii) Two term expression is called a binomial.

(iii) Three term expression is called a trinomial.

- Terms which have the same algebraic factors are like terms. Terms which have different algebraic factors are unlike terms. Example $4xy$ and $-3xy$ are like terms and the terms, $4xy$ and $-3x$ are unlike terms.

Interdisciplinary linkages and infusion of life skills

- 1) develop logical thinking .
- 2) collaboration and team working

Resources including ICT :- 1) NCERT

2) Thinker active

3) Smart class content

Assessment items :- Exercise question of NCERT book and worksheets book will be given

Feedback and remedial teaching :-

Recapitulation: - 1) Think of at least two situations in each of which you need to form two algebraic expressions and add or subtract them.

2) Simplify combining like terms.

$$(3y^2 + 5y - 4) - (8x - y^2 + 4)$$

3) Simplify and find the value at $x=4$, $Y=0$

$$4(2x-1) + 3y + 4$$

4) What should be subtracted from $2a+8b+10$ to get $-3a+7b+16$?

Inclusive practice and full participation without discrimination

participation of students: - 1) What are the terms in the following expression? Show how the terms are formed. Draw a tree diagram for each expressions.

$$8y + 3x^2, 7mn-4, 2x^2 y$$

2) Identify the coefficients of the terms of following expressions

$$4x-3y, a+b+5, 2y +5, 2xy$$

Topic: - Perimeter and Area

Days required to complete the chapter :- 8 to 10

PK Testing: -

1. What is perimeter of a plane figure?
2. What is the area of a plane figure?
3. What is the difference between perimeter and area?
4. What is the perimeter of a square and rectangle?
5. What is the area of a square and rectangle?

Vocabulary: - Area, perimeter, polygon, altitude, circumference , diameter.

Important Spelling: - Area, perimeter, altitude, circumference.

Specific Learning outcomes: - (i) The students will be able to

(ii) Restate the formula and perimeter of rectangle and square

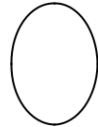
(iii) Compute the area of a parallelogram, given the length of its base and height. o Compute the area of a triangle and circle.

(iv) Determine which concepts and formulas are needed to complete each practice exercise.

Pedagogical strategies

Explanation with innovative method:- Teacher will use the black board to make the concept more clear.

Activity: - Teacher will draw a circle of radius r on white drawing sheet and cut it out with the help of a pair of scissor to get a circular disc.



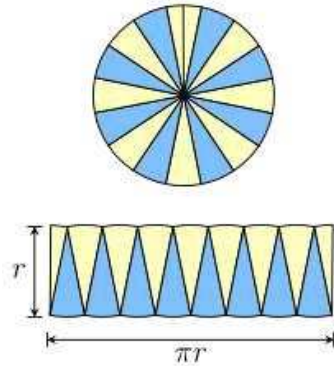
After this teacher will fold the circular paper as shown in figure



Unfold the circular disc, teacher will divide it into 16 equal parts.

Then teacher will tell to a child to colour the upper half of the circular disc with blue colour and lower half with pink colour as shown in figure.

At last, teacher will cut this circle into 16 parts with the help of scissor and paste them on a white drawing sheet as shown in figure: -



Length of parallelogram = $1/2$ (Circumference) = $1/2 \times 2\pi r = \pi r$

Breadth of parallelogram = radius of circle = r

Area of Parallelogram = $l \times b = \pi r \times r = \pi r^2$



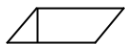


Area of circle = πr^2

Procedure : - Teacher will introduce the perimeter and area of a closed figure.

Perimeter : - It is the total distance around a closed picture.

Area: - It is the part of the plane occupied by the closed fig.

Then teacher will tell the children to draw the following shapes

Shapes	Perimeter	Area
Square 	4 x side	(side) ²
Rectangle 	2 (length + breadth)	length x breadth
Parallelogram 	2(a+b)	b x h
Triangle 	sum of all sides	$1/2 \times b \times h$
Circle 	$2\pi r$	πr^2

Art integration with other domain: - Teacher will explain them to do bamboo craft. Student will make a square and a triangle using match sticks and they will find perimeter.



Teacher will tell them a poem on perimeter and area, which will develop singing skill in them.

Area and perimeter sitting in a tree. Looking at the garden as spacious as can be Area is the space that you see on the ground perimeter is the fence that you put all around.

Interdisciplinary linkages and infusion of life skills

- 1) Develop logical thinking
- 2) collaboration and team work

Resources including ICT: -1) NCERT book

2) Black Board

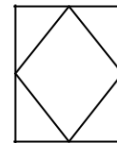
Assessment items:-

- 1) Find the area of square whose perimeter is 320m.
- 2) Find the height of triangle whose area is 16cm sq. and base is 3 cm.
- 3) Find area of circle of radius 30cm.
- 4) How many times wheel of radius 278cm must rotate to cover 325m.

Feedback and remedial teaching

Recapitulation: -1) Which square has the larger perimeter?

- 2) Find the area of a triangle where base is 5 Cm and altitude is 6 Cm
- 3) Find the area of a circle where diameter is 9.8 m.



Inclusive practice and full participation without discrimination

Students participation: -Students will find the circumference of a circle under the guidance of teacher. One child name Tanya cut different cards, in curved shape from a cardboard. She wants to put lace around to decorate three cards. Teacher will tell her to find the length of the lace required.

Mark a point on the edge of the card and place the card on the table mark the position of the point on the table also new roll the circular card on the table along a straight line till the marked point again touches the table. Measure the distance along the line. This is the length of the lace required.

