

## April 2023

No. of teaching days- 20

Topic:- L-1 Shapes (Identify and classify angles, Nets and views of Solids)  
L-2 Patterns (Patterns in rotation, Patterns in Numbers) [Inquiry based]

L-1 Shapes

Learning outcomes :-

Knowledge objective: Students will be able to learn about angles, naming the angles and nets of cube, Cuboid cylinder and Cone.

Understanding objective: Students will be able to differentiate the types of angles. They will know about the top, front and side views of objects.

Application objective:- Students will understand how to use a protractor and how a 3D shape can be opened up into 2D shape.

Skill objective:-

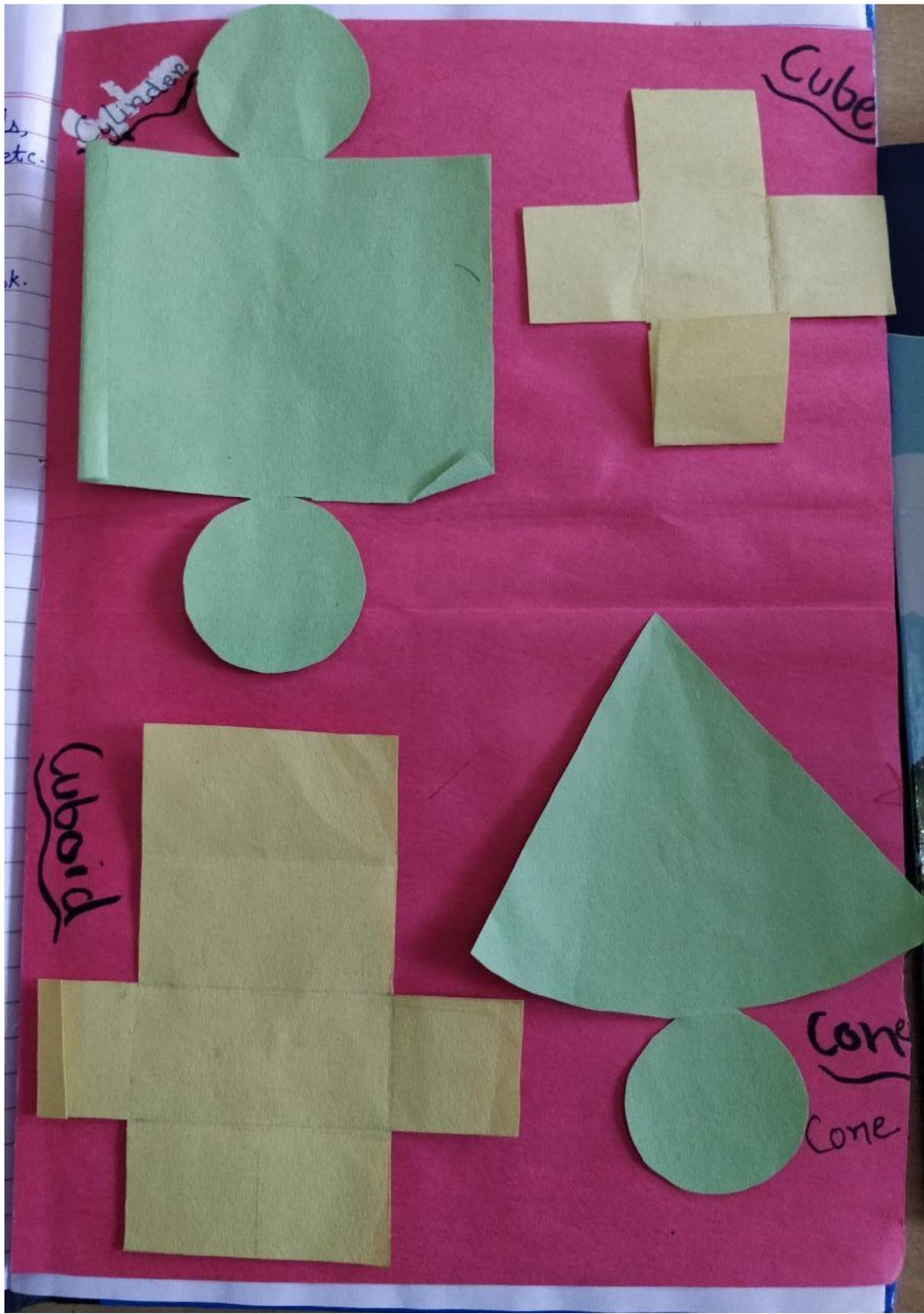
Previous knowledge testing: Students will be asked

- a) what is ray?
- b) Can they measure a line?
- c) Have they heard about angles?
- d) can they know how to make a net of cube?

Teaching aid - Chalk, duster, board, models, protractor, lab, books, videos etc.

Pedagogical Strategies: The teacher will explain first of all line, line segment, ray and point from T. book. Then the teacher will explain angles with the help of a clock. Angles are two rays (the hands of the clock) that are joined at the vertex. Teacher will explain diff. type of angles with the help of a clock. (Acute, Right, obtuse, Straight, Reflex and Complete. angle). Then how to measure the help of the protractor. After explaining angles, the teacher will Start next topic: Nets and Views of solids. The 2D framework of a 3D Solid is called its net. This 2D framework, when folded, results in the 3D Solid. A 3D shape can have more than one possible net.

Group activity: Teacher will show a net of cube in the class and the all other students will make nets of cuboid, cone and cylinder



Cylinder

Cube

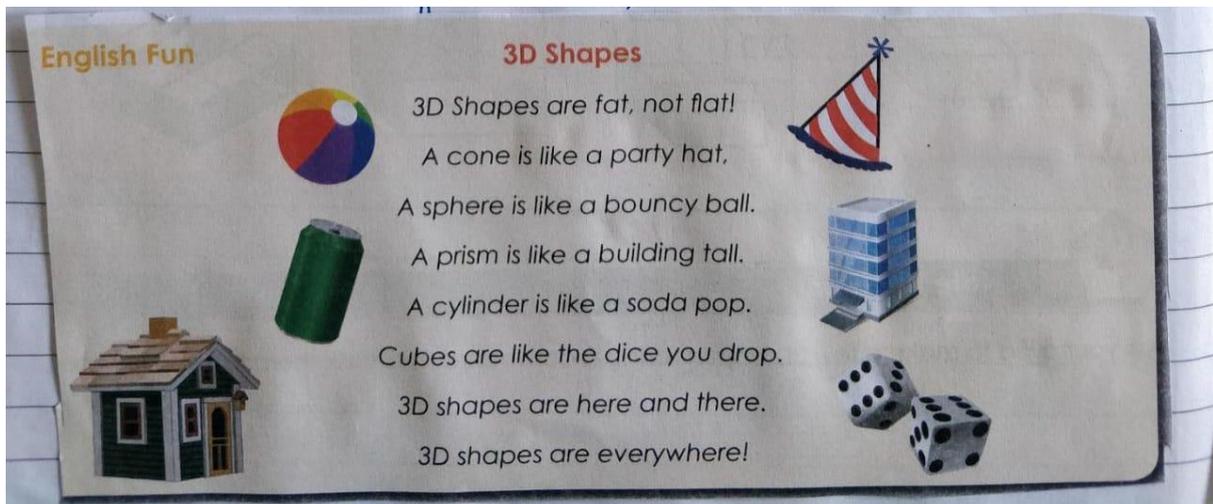
Cuboid

Cone  
Cone

Art integration: The students will be taken to maths lab to Show charts. Students will do strips activity in the class. They will take two Strips (two arms) and a pin (vertex) to Show different types of angles.



Interdisciplinary Linkage and infusion of Life skill:- Students will be able to know that there are many things in real life that create angles such as Clothes, Rangers, scissors, partially opened door etc. As the students will perform group activities in the class, the spirit of Collaboration will be awakened the minds of the Students



Recapitulation - Recapitulation of concept 1.1 and 1.2. will be done. Oral revision of types of angles will be given.

Resources including ICT :- e books, workbooks Internet, youtube

<https://youtu.be/-WHhWB19bcG>

Assessment items - To check the Conceptual assessment Clarity various types of assessment will be taken. Exercises in the Textbook, workbook will be done. Revision assignment will be given. Different types of questions from Textbook and workbook will be done. Practice worksheets will be given

Feedback and remedial teaching : Slow learners/ weak students will be helped by giving extra worksheets. They will be encouraged to do extra Sums and watch more videos related to the topic.

Inclusive Practices and full participation without discrimination-

- \* Group activity
- \* Watching videos
- \* Charts
- \* Books
- \* Collaboration
- \* Hands on learning

Topic:- Patterns Concept 2.1 Patterns in Rotations  
2.2 Patterns in Numbers based

(Both inquiry based)

Learning outcomes -

Knowledge objectives: Students will be able to learn about rotation of shapes and patterns in numbers.

Understanding objects: They will be able and shapes to to do arranging figures and shape to form patterns.

Application objects: Students will be able to use rotation of shapes, how to rotate clockwise or anticlockwise. They will use quarter then, half twin, one third turn,etc. in daily life.

Skill objects: Patterns help children make predictions because they begin to Understand what comes next. They will be able to learn how to make logical Connections and use reasoning skills. P. k. testing:- Students will be asked-  
a) What is clockwise rotation? Q: What is anticlock wise rotation?

Q. Can you tell what will be the next number 30, 25, 20, \_\_\_\_, \_\_\_\_

Teaching aids- chalk, duster, Board, fan, Lab, books and videos.

Padagogical Strategies: The teacher will explain that there are two types of Patterns. Patterns in rotation or patterns in numbers. Turning shapes, letters figures in clockwise or anticlock wise direction is called the rotation of shapes. Teacher will explain Quarter turn (go rotation) half turn (180 rotation), one third then (120°) and one Complete turn (360° rotation).

Teacher will explain that numbers patterns are sequence of number with a Common relationship. For example in the sequence 3,6,9,12 Each number is increasing by 3. Pattern in numbers can be made by adding the even no's, odd no's or by multiplying Specific numbers like 1, 3, 6, 10, 15, 21

(+ 2, + 3, + 4, +5,+6) In this Sum we are adding 2 in 1, 3 in 3, 4 in 6 and next 5 in 10 and 6 in 15.

Group activity:- Teacher will show an activity of Patterns in class. Students will make it. They will cut and paste colourful triangles to show the Pattern (next four) of quarter turn clockwise direction half turn pattern wing triangles. They will show Same Colourful triangles.

Art integration: Art integration in maths not only increases curiosity, but aids in Constructing deeper Understanding of Math Concepts. It helps to develop creative problem Solving skills.

Interdisciplinary Linkage and infusion of Life Skill:- After understanding the concept of Patterns Students will be able to link this knowledge to the other Science, Subjects like English, Social Science etc

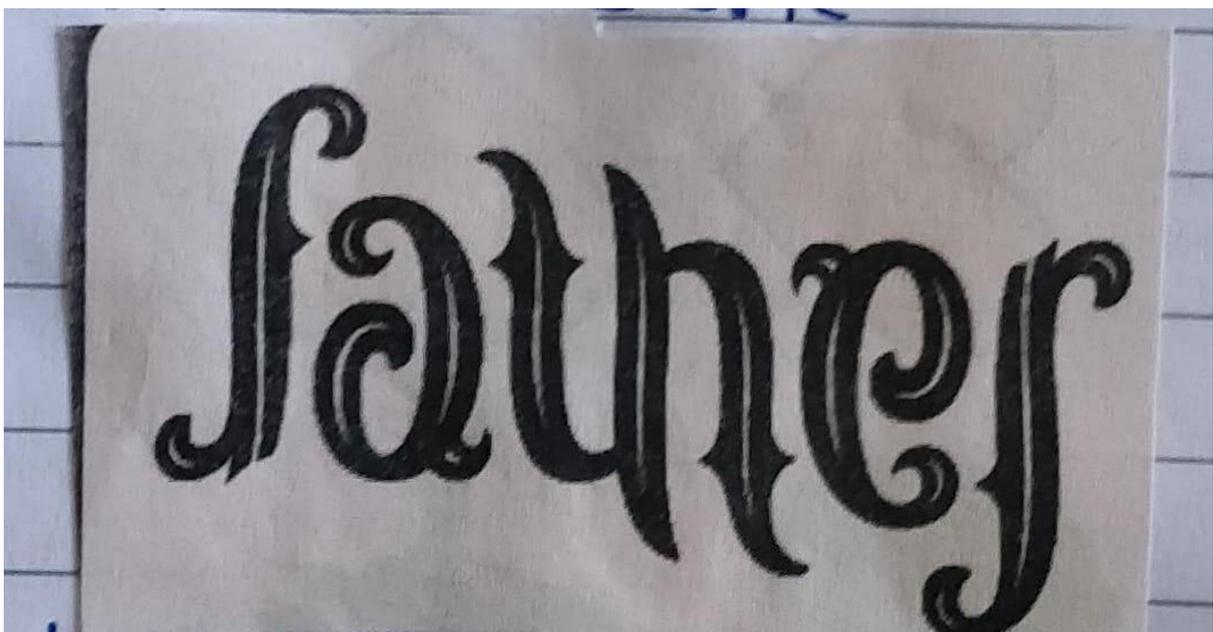
English fun: Ambigrams are art form of words which when viewed from the top the bottom look the same.

Recapitulation - Recapitulation of Concept 2.1 and 2.2 will be done. Patterns in rotations will be asked from the students.

Resources including ICT: e books, work books, Internet, youtube.

<https://youtu.be/g2FGtEf7Ams>

Assessment items:- Students will be asked to Complete drill time 1 and 2 which contain MCQ, Fill-ups and word problems from textbooks. Students will do 5 sums daily for practice in note books.



## MAY 2023

No. of working days- 20

Topic

L-3 Large Numbers

3.1 Indian and International system.

3.2 Roman Numerals.

L-4- Addition and Subtraction.

L-5 Multiplication

L-3 Large Numbers:-

Learning outcomes: Students will be able to understand smallest and largest 7 digit and 8 digit no's and also reading and writing large numbers. Teacher will explain the rules of Roman numerals.

Understanding objectives: Students will Understand how to compare and order 8 digit no's and how to find place value and face value of the note.

Application objectives: Students will be able to use this Concept in daily life & importance of numbers.

Skill objectives:- Students will be able to form the largest and smallest 6,7,8 digit numbers. And they can make place value charts also. They will be able to describe and demonstrate how to Convert Roman numerals.

P.K. testing: Students will be asked the following questions

- a.) \_\_\_\_ is the predecessor of 96380
- b) Smallest 6 digit no. Is \_\_\_\_
- c) How many places are there in ten lakh period?
- d) What are the 7 basic Roman numerals?

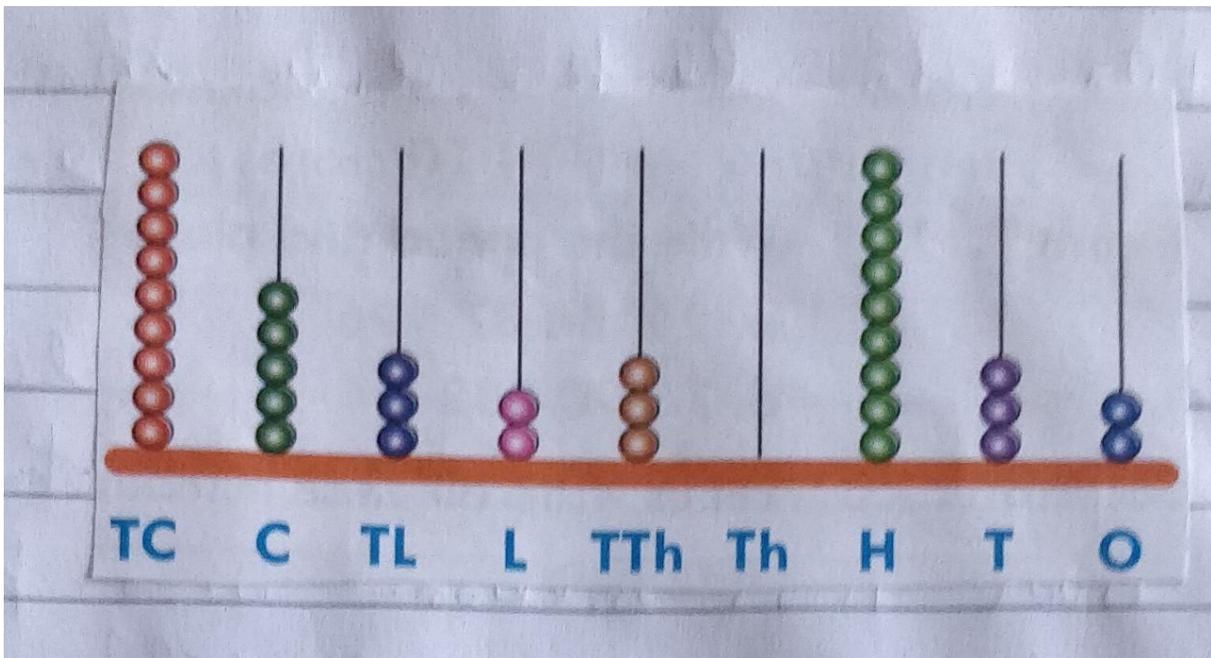
Teaching aid:- Chalk, duster, black board, Smart board, Videos clips, charts.

Pedagogical strategies :- Students will be taught that the place value chart helps us to find out the value of each digit of numeral according to its position by Showing of Indian place value chart and International place value chart. After this teacher will explain place value/ Face value expanded / short form, successor / Predecessor etc. After making sure that the students have Understood all the basic terms related to the no's will be explained to the students by giving examples from their daily life. After this teacher will explain Roman

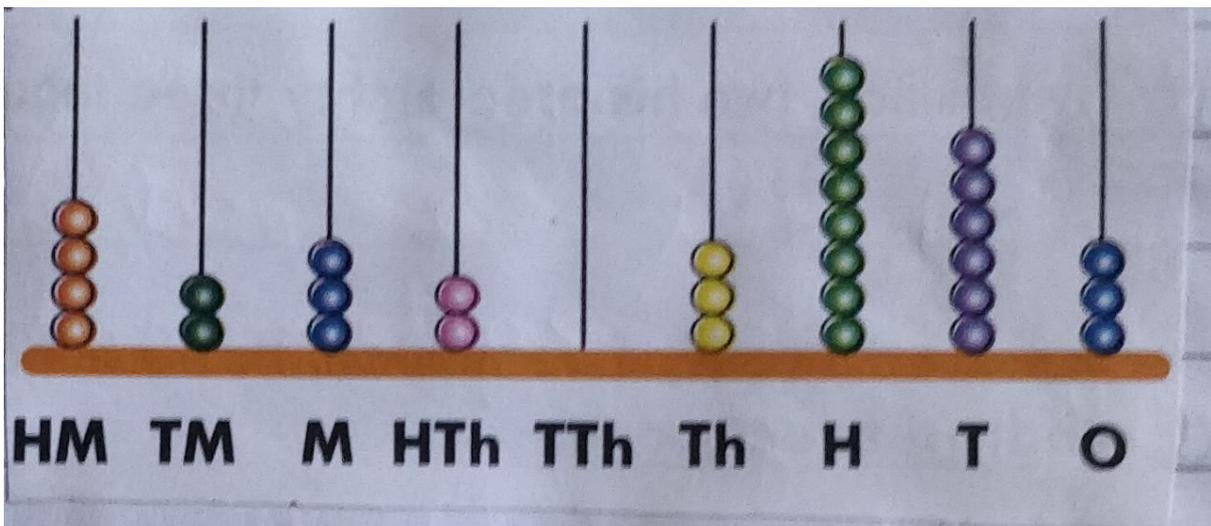
numerals 1, 2, 3 are Hindu Arabic numerals. The Seven basic Roman numerals are I, V, X, L, C, D, M. We can make big to big numbers by using above mentioned Roman numerals.

Roman numerals (symbols)	I	V	X	L	C	D	M
Hindu-Arabic numerals (values)	1	5	10	50	100	500	1000

Group activity:- Students will make models and of abacus showing both Indian and International systems using Colourful pens, sticks and beads.

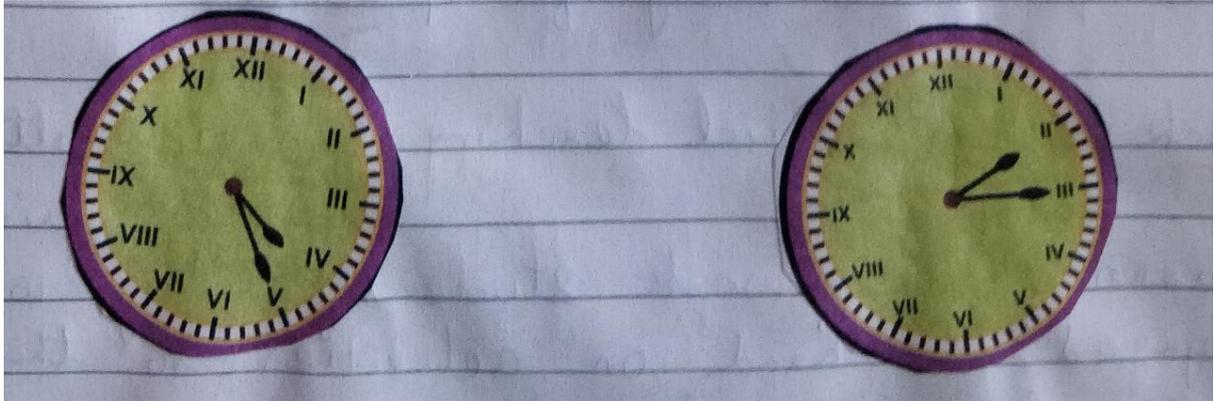


*Indian System*



*International System*

Art integration:- As the students get practice of making abacus models it will help them improve their artistic skill. Students will do the following activity for Roman number. Students will be asked to read the clocks and write the time using Hindu Arabic numbers:



Interdisciplinary Linkage and infusion of Life skills:-

After understanding of numbers and Roman numerals students will be able to link this knowledge to other subjects like s.st., science, eng.

Social Studies: China the world's most populous Country. It has a population of over 1.35 billion. This population of our Country in 2016 was 1.34 billion.

Recapitulation:- Recapitulation of Concept 3.1 and 3.2 will be done and of Indian system and International system will be given.

Resources including ICT:- e books, work books, charts, models, videos and you tube link <https://youtu.be/8804IKVZano>

Assessment items: Students will be asked to "Complete drill time 1 and 2 which Contain M.C.Q, Fill-ups etc. Students will be given 5 questions daily for practice.

Feedback and remedial teaching:- Extra attention will be paid slow learners and weak students. be engaged in hand on activities so that they can learn easily.

L-4 Addition and Subtraction

Concept 4.1 Add and subtract large numbers.

Learning outcomes:-

Knowledge objectives: Students will be able to do add and subtract Large numbers

Understanding objectives: Students will understand the meaning of addition and subtraction.

Application objectives: Students will be able to apply addition and Subtraction operations in real life situations.

Skill objectives:- They will be acquainted with the skill of adding and Subtracting.

Previous knowledge testing:- Students will be asked the following questions

a)  $\underline{\quad} + 9680 = 9680$  .

b)  $5975 + 280 = \underline{\quad} + 5975$

c)  $9999 + 1 = \underline{\quad}$

d)  $100000-1 = \underline{\quad}$

Teaching aids :- chart, chalk, duster, Smart board, videos, you tube.

Pedagogical strategies:- Teacher will explain to the students the Concept of addition and Subtraction by giving examples from their daily life.

Teacher will explain in vertical or Column addition, write the number one below the other, starting with the ones or unit place in Subtraction. Write the unit the bigger number at the top. Students will be taught properties of add. and Sub. and word problems of add and sub. by showing the module on the Smart board.

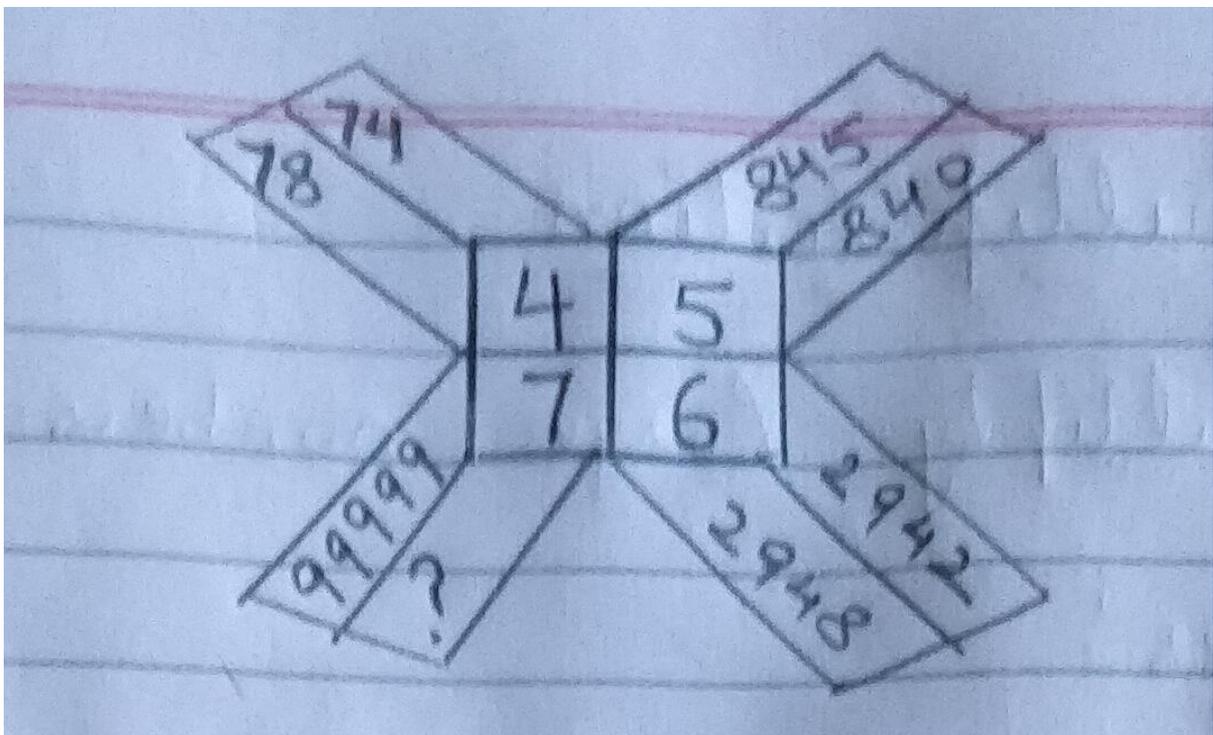
TC	C	TL	L	T Th	Th	H	T	O
8	15	12	12	6	10	10	7	17
<del>9</del>	<del>8</del>	<del>3</del>	<del>2</del>	<del>7</del>	<del>4</del>	<del>0</del>	<del>8</del>	<del>7</del>
3	6	5	8	4	2	7	1	9
5	9	7	4	2	8	3	6	8

Group activity:- Students will write numbers from 1 to 9 Such that each row, Column and diagonal add upto the Same number (Magic square)

2	7	
9		
	3	

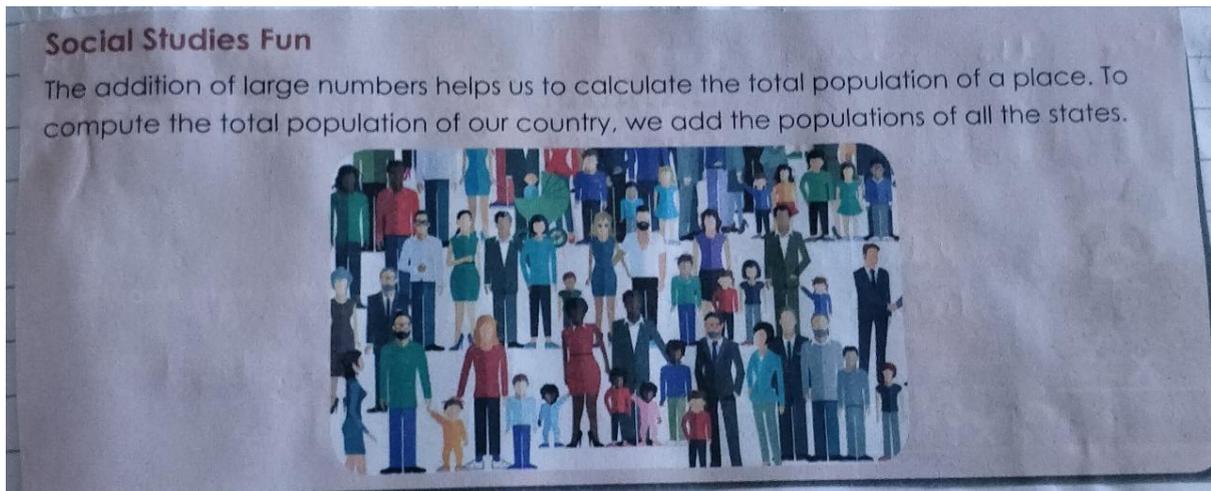
Art integration:- Art integration in Maths not only increases Curiosity, but adds in Constructing the a deeper understanding of Maths Concept. It helps children to develop creative problem solving skills.

They will find missing numbers.



Interdisciplinary linkage and infusion of life skill:-

After understanding the Concept of Addition and Subtraction, students will be able to use this knowledge to the other subjects.



Recapitulation: Recapitulation of Concept 4.1 will be done. Properties of addition and Subtraction will be revised.

Resources including ICT:- Text book, workbooks, and You Charts, model, videos. Youtube link

<https://youtu.be/YFYosvorgig>

Assessment items: Students will be asked to complete drill time which contain McQ, Fill-ups

Feed back and remedial teaching: Extra attention will be paid on slow learners. So that they can learn easily

## **L-5 Multiplication**

Concept 5.1 Multiply Large numbers.

Learning out Comes:-

Knowledge objectives:- Students will able to know the meaning and purpose of multiply.

Understanding objectives:- Students will understand the properties of multiplication, finding the missing numbers in the given product.

Application objectives:- Students will be to apply multiply in real life situations.

Skill objectives:- They will be able to multiply 4 digit and 5 digit numbers by 2-digit and 3 digit numbers.

Previous knowledge testing: Students will be asked the following questions

a)  $7875 \times 0 = \underline{\quad}$  .

b)  $285 \times 142 = \underline{\quad} \times 285$

c)  $6662 \times \underline{\quad} = 6662$

Teaching aids:- Blackboard, chalk, Model, Smart board, videos, you tube link

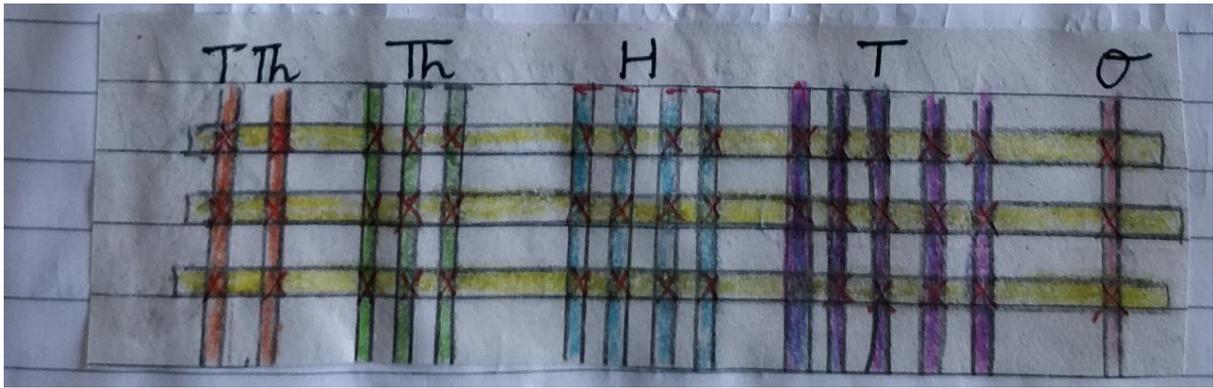
Pedagogical strategies:- Teacher will explain the students the concept of multiply by different examples from their daily life

Teacher will explain the Properties of multiply like zero property, Commutative property, Associative property and distributive property by giving examples on board. After explaining this the teacher will explain multiply 3 digit by 2 digit, 4 digit by 3, 5 digit by 4 digit and then the word problems of same topic

	T	L	T	Th	H	T	O
				(3)	(2)	(3)	
				(5)	(4)	(5)	
				3	7	6	8
				×	4	0	7
			(1)				
			2	6	3	7	6
+	1	5	0	7	2	0	0
	1	5	3	3	5	7	6

Group activity:- For group activity students will be asked to multiply 5 digit by 1 digit number using Colourful tapes.

23451 X 3



$$= 6 \times 10000 + 9 \times 1000 + 12 \times 100 + 15 \times 10 + 3 \times 1$$

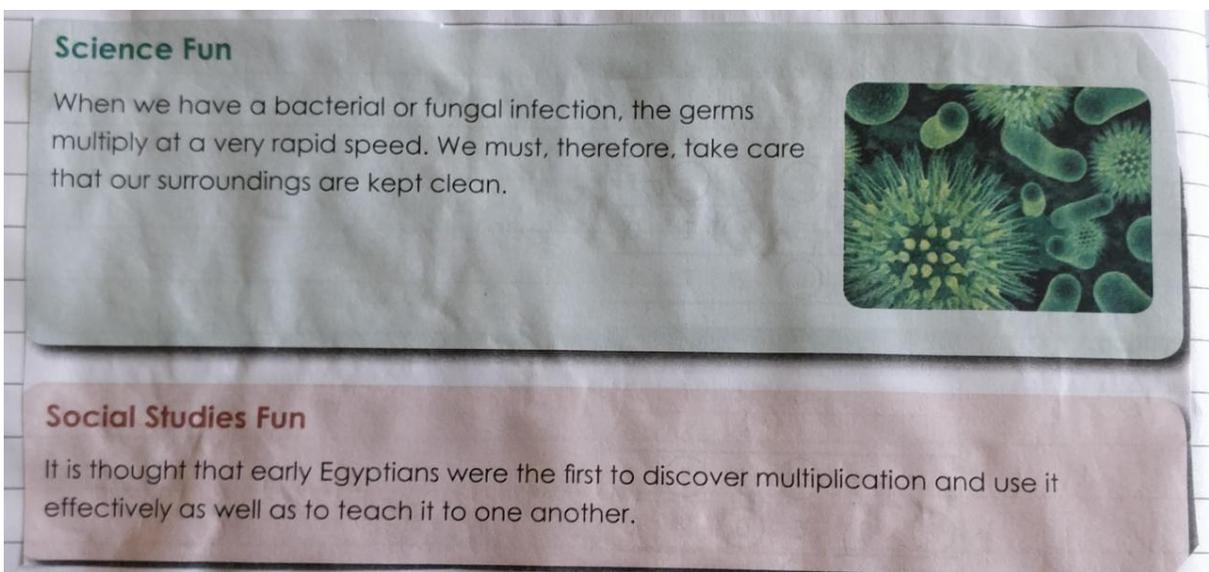
$$= 60000 + 9000 + 1200 + 150 + 3$$

$$= 70,353 \text{ ans}$$

Art integration:- Art integration in Maths not only increases the curiosity but adds in Constructing a deeper understanding of Maths Concept.

Interdisciplinary Linkage and infusion of Life Skill:-

After understanding the Concept of multiply Students will be able to use this knowledge to other subjects.



Recapitulation:- Recapitulation of Concept 5.1 will be done. Properties of multiply will be revised.

Resources including ICT - Textbooks, work book videos etc.

Assessment items:- Students will be asked to Complete the back exercises in the text book and work book.

Feedback and remedial teaching:- Extra attention will be paid on slow learners by giving extra work sheets.

## **L-6 Division**

Concept 6.1 Divide large numbers

6.2 Factors and Multiples.

6.3 H.C.F and L.C.M

Learning outcomes:-

Knowledge objectives: Students will be able to do dividing 5 digit by 1 digit and 2 digit numbers.

Understanding objectives:- Students will be able to understand the Concept of division and its relationship with multiplication.

Application objectives: Students will be able to solve real life problems. involving division of 2 digit numbers.

Skill objectives: They can easily use divisibility rules in daily life. and Can find factors and multiples of any number.

P.K. testing: Teacher will ask some questions like

a)  $3875 \div 3875 = \underline{\quad}$

b) Do you know what is the full form of H.C.F and L.C.M?

c)  $697 \div 0 = \underline{\quad}$

Teaching aids:- white board, charts, models, chalk, videos, Smart board.

Pedagogical strategies:- Teacher will explain the students the Concept of division by examples from their daily life. Properties of division will be explained. After this teacher will explain division by 2 and 3 digits and word problems. of division. Divisibility rules by 2, 3, 4, 5, 6, 9 and to will be explained. and how can this rules help us. Teacher will explain Prime and Composite numbers. H. C.F will be explained. by using long division method and L.C.M will be explained by using common division method.

Number	Divisible by						
	2	3	4	5	6	9	10
464	✓	×	✓	×	×	×	×
390	✓	✓	×	✓	✓	×	✓
3080	✓	×	✓	✓	×	×	✓
4500	✓	✓	✓	✓	✓	✓	✓

Group activity:- Students will find the Common factors and F.C.= using graph paper.

Factors of 12.  
Factors of 12

Factors of 16  
Factors of 16

Common factors = 1, 2, 4  
H.C.F. = 4

Art integration:- Art integration into maths Can be a fun and engaging way to help students understand concept like division, HCF and LCM. Teacher can create a game where students match pairs of numbers based on their HCF. For example students can create cards with pairs of numbers and then match them up based on their HCF.

Interdisciplinary Linkage and infusion of Life skill:- After understanding the Concept of division students will be able to use their knowledge to the other subjects.

**Social Studies Fun**

Recently, the state of Andhra Pradesh was divided into Telangana and Andhra Pradesh. They are currently sharing Hyderabad as their capital. Do you think all the resources of the state can be equally divided? Can everything in life be equally divided?

Recapitulation: Recapitulation of Concept 6.1, 6.2, 6.3 will be done. Oral Rev. of divisibility rules will also be done.

Resources including ICT : e books, charts, models,

Video links etc.

Assessment items:- Students will be given a class test

a) the largest 2 digit Prime no. is \_\_\_\_

b) \_\_\_\_ is neither prime nor Composite.

c) Divisibility rules of 3 and 9.

### **L-7 Time**

Concept 7.1 Convert time (Inquiry based) 7.2 Add and Subtract time.

Learning outcomes:-

Knowledge objectives:- Students will be able to Convert larger units to smaller units of time and vice versa.

Understanding objectives: Students will be able to develop an understanding of elapsed time and how to measure it.

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.

P.K. testing:- Simple questions based on time will be asked like :-

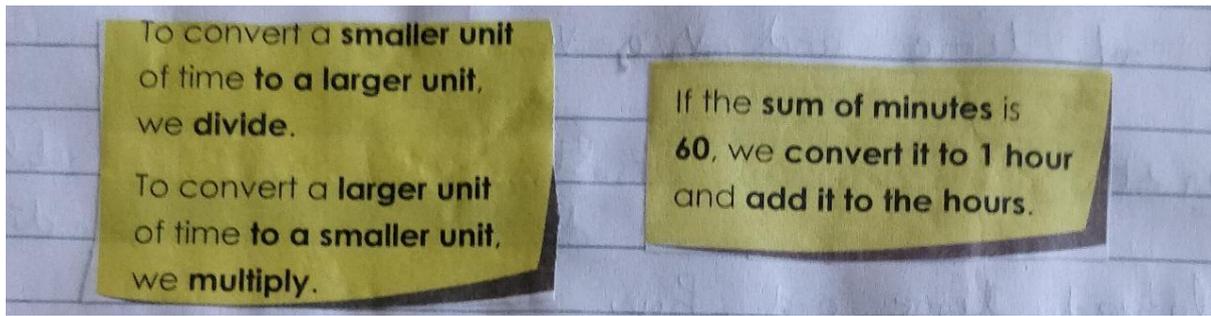
a) 6:40 Pm = \_\_\_\_ hrs

b) 1 hr = \_\_\_\_mins

c) Hour hand takes. \_\_\_\_ rounds in a day.

Teaching aids:- Chalk duster, wall clock, Smart board, green board.

Pedagogical Strategies:- First of all teacher will show different hands of Clock to the students by showing a wall clock Relation between hours, minutes and seconds will be explained. After this teacher will explain how we can use Convert hrs to mins and mins. to seconds by giving examples. Then She will explain addition and Subtraction of time



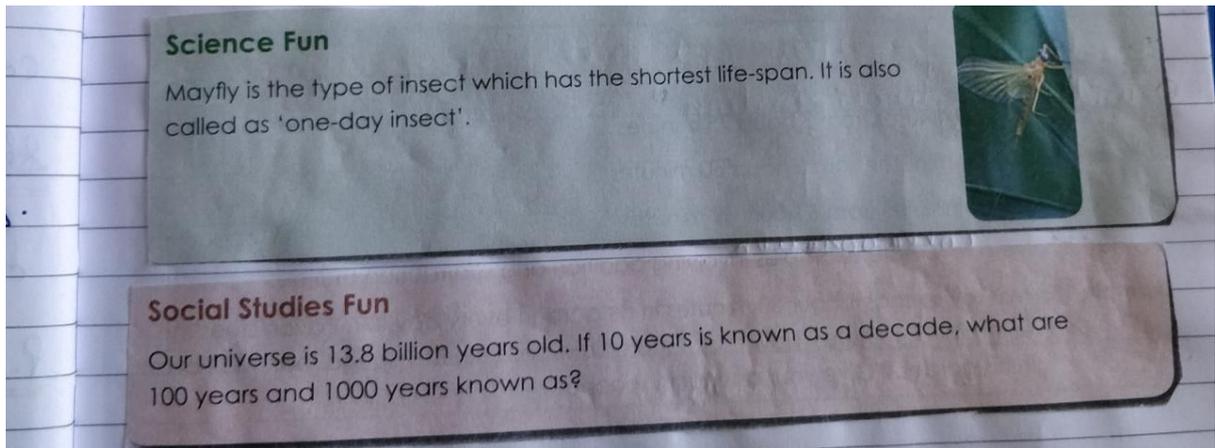
Group activity:- The class will be divided into small groups. Give each group a clock and worksheet with a time related problems. Instruct the students to Solve the problems on the worksheet Such as 2 hrs have \_\_\_ mins and \_\_\_ Seconds.

Encourage the students to use the clocks to help them Solve the problems and to check their answers using the clock. After the groups have finished the worksheet, have them. Come up with their time related problems to share with the class.

Hours	Minutes	Seconds
2		
	240	
		360
13		
		28800

Art integration:- Teacher will divide the class into small groups and assign each group a diff time period or to event related the chapter Time. One group could be assigned the invention of the clock, another group could be assigned the history of Calendars and so on. This activity not only helps students learn about diff. events in history related to time but also allows them to express their creativity through art.

Interdisciplinary Linkage and infusion of Life skill :- Teacher will tell the students about the importance of study of time in the study of other subjects.



Recapitulation!

:- To check their understanding a few questions will be given to the students in the form of fill-ups M.C.Q, True/False etc.

Resources including ICT:- Smart board, S work books, you tube  
<https://youtu.be/MIdal6VX909>

Assessment items: Students will be asked or given a class test

- a) Convert 6 hr 15 mins. into mins
- b) Add 19 mins 13 sec. and 26 mins and 15 sec
- c) 16:50 hrs = \_\_\_\_

Feedback will and remedial teaching:- A model of clock be shown and slow learners will be given extra hand experiences to understand the Concept of Time

Inclusive practices and full participation without discrimination:-

- \*Group activity
- \*Collaboration
- \*Charts
- \*Models
- \*Hand on activities

## Term II

### L-8 Money

Concept 8.1 Unitary method in Money.

Learning outcomes:-

Knowledge objectives: Students will be able to know Unitary method in Money and chart of exchange rates.

Understanding objectives: Students will understand the concept of money and its role in our daily lives.

Application objectives: Students can demonstrate the ability to manage money responsibly.

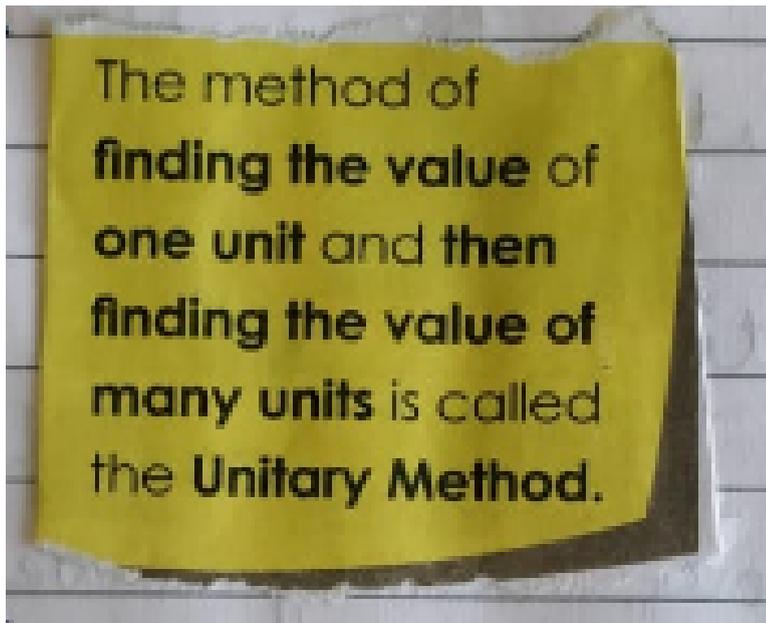
Skill objectives: Students can identify different types of Currency and their values.

P. R. testing:- Students will be asked the following questions:

- a) ₹ 1 = \_\_\_ P
- b) If the Cost of 1 pen is ₹10 what is the Cost of 5 pens?
- c) ₹75.87 = \_\_\_ P

Teaching aids: Blackboard, chart paper, markers, Play money, videos

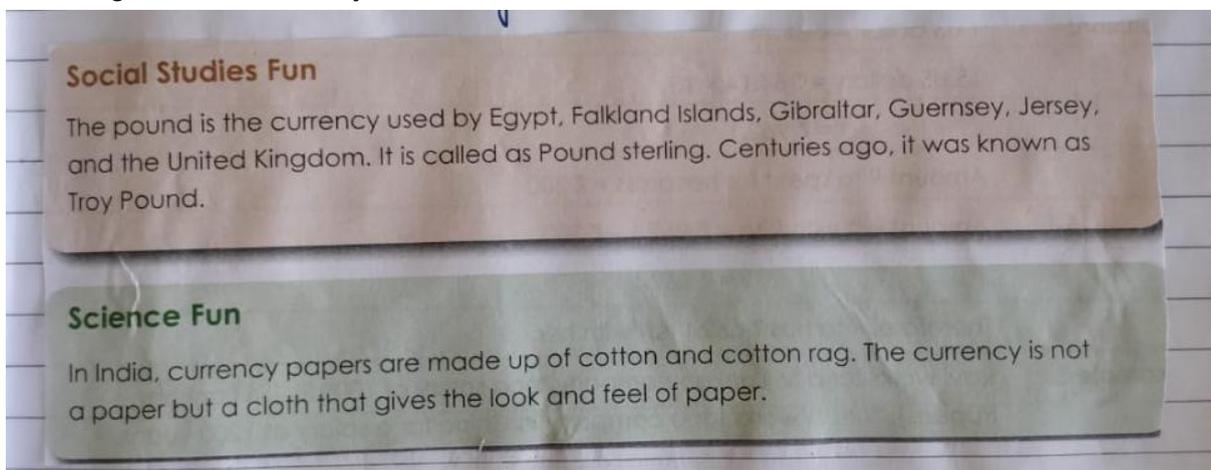
Pedagogical strategies: First of all teacher will explain that money is something that we use to buy things we need. Teacher will discuss the types of currency and their values. After this teacher will explain the unitary method. It is a problem solving method that involves finding the value of one unit and using it to solve problems. Like this we can find the value of many units.



Art integration: Art integration is a great way to engage students and help them understand unitary method concepts in a more visual and creative way. Teacher can assign students to create an art project that demonstrates their understanding of the unitary method.

Interdisciplinary Linkage and infusion of Life skill:

After understanding the concept of unitary method Students will be able to use this knowledge to the other subjects.



Recapitulation:- To check their understanding Some questions will be given for C. test.

Resources including ICT: Board, charts, Play money, videos, youtube etc.

Assessment items: Students will be asked to complete the back exercises In the textbook and workbook.

Feedback and remedial teaching:- Teacher will give extra attention to the slow learners and weak students. Extra worksheets will be provided.

Inclusive practice and full participation without discrimination:-

- group activity
- watching videos
- Collaboration
- Charts

**L - 9 Fraction I**

**L - 10 Fraction II**

Concept 10.1 Add & sub.

10.2 Multiply

10.3 Reciprocal

9. 1 Equivalent fraction

9.2 Fraction in its largest terms.

9.3 Compare

9.4 Add & sub.

Learning Outcomes:-

Knowledge objectives: Students will be able to understand the meaning of fraction, finding the missing numerators and denominators

Understanding objectives: Students will understand unlike fraction, Comparison, add / sub of unlike fractions.

Application objectives: Students will be able to Compare, add, sub. reciprocal of fraction in their daily life.

Skill objectives: Students will be able to Compare, multiply and reciprocal of different fractions.

Previous knowledge testing: Teacher will ask Some questions like.

- a)  $9/16 = 27/?$
- b) Put symbol  $5/9$  \_  $8/9$

c) Convert 6 whole  $\frac{5}{9}$  into improper fraction

Teaching aids:- Black board, Smart board, chalk, duster, Chart, model

Pedagogical strategies: Teacher will explain equivalent fraction, cross multiplying, missing numerator and denominator. Teacher will explain add, sub, reciprocal of fraction by showing modules on Smart board. Reducing fraction into its lowest term will be explained with the help of H.C.F and Cutting method. Put symbols by cross multiplication method and Ascending / Descending order by like fraction method will be explained. Multiplication & division of fraction will be explained by the cutting method.

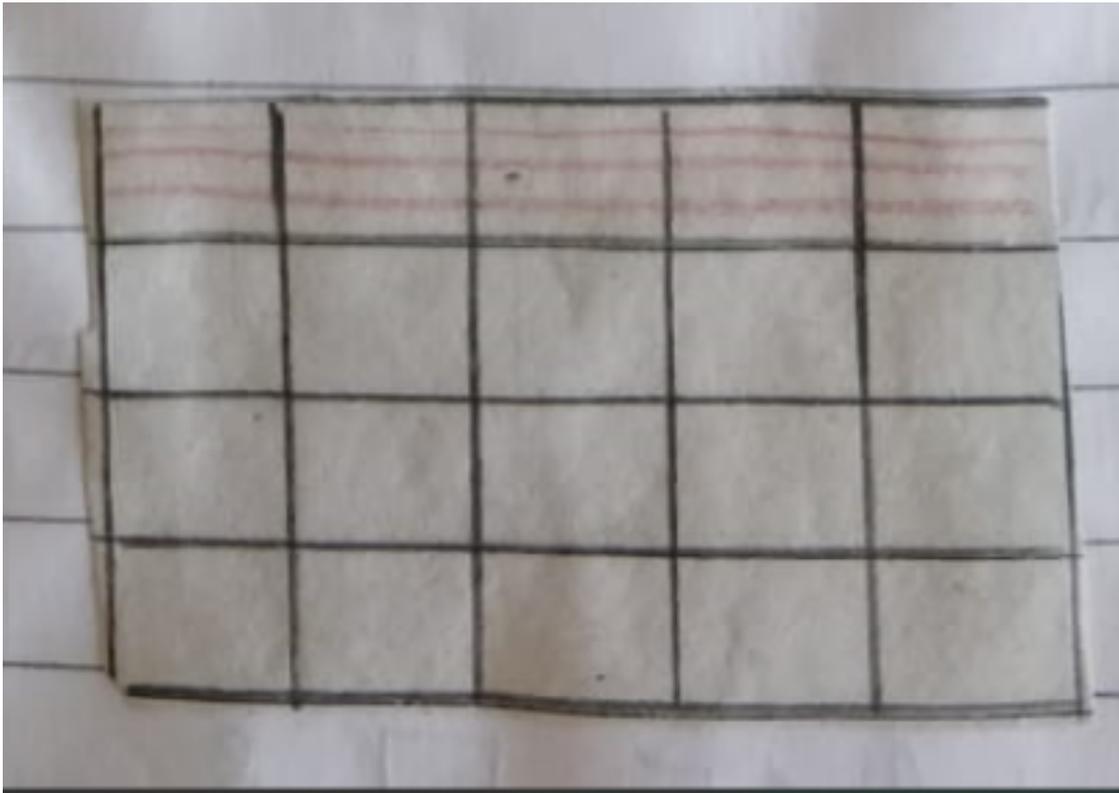
Group activity: Students will find product of fraction using a squared paper.

Find the product of  $\frac{1}{4} \times \frac{3}{5}$

a) Take a square paper.

b) Since denominators of the given fraction are 4 2 5, cut out a 4x5 rectangle from the squared paper.

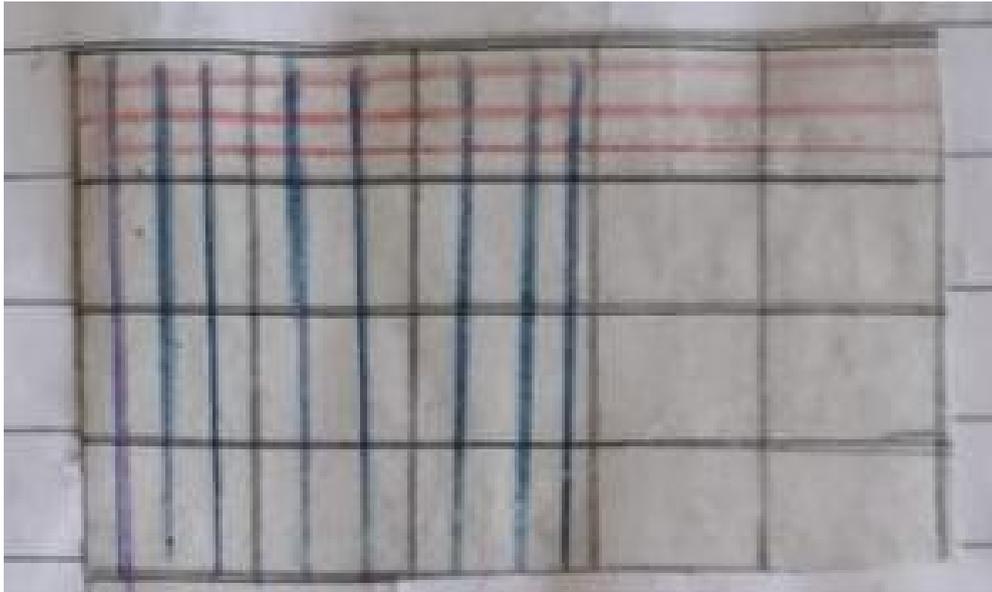
c) Now shade  $\frac{1}{4}$  of the rectangle horizontally.



d) Again shade  $\frac{3}{5}$  of the rectangle vertically as shown

e) Fraction of the rectangle having both horizontal (red) and vertical (green) lines, 3 parts out 20 i.e  $\frac{3}{20}$ .

$$\rightarrow \frac{1}{4} \times \frac{3}{5} = \frac{3}{20}$$



Art integration: Draw cutouts of 20 circles. Now give  $\frac{1}{5}$  of them to your friend or partner. So divide the circle into 5 equal groups and take away 1 group and give to your partner. This gives 5 groups with 4 circles in each group. So  $\frac{1}{5}$  of 20 is 4.

Interdisciplinary Linkage and infusion of Life skill:-

**Social Studies Fun**

Did you know that the Moon is  $\frac{1}{4}$  the size of the Earth? Interestingly, your weight on the Moon is  $\frac{1}{6}$  of that on the Earth.

Try calculating what your weight on the Moon would be.



**Science Fun**

In our atmosphere,  $\frac{78}{100}$  part is made up of Nitrogen,  $\frac{21}{100}$  by oxygen and  $\frac{1}{100}$  part is composed of other gases.



Recapitulation:- a) Find an equivalent fraction of  $\frac{7}{11}$  having denominator 44.

b) Multiply  $12 \text{ whole } \frac{5}{6} \times 1 \text{ whole } \frac{5}{22}$

c) Divide  $\frac{18}{7} \div \frac{26}{56}$

d) Reciprocal of 3 whole  $\frac{1}{2}$  is

Resources including ICT : Smart board, e books, electronic gadgets charts you tube link

Assessment items: Students will be given a short text including fill-ups, McQ. Short questions to check their Understanding

Feedback and remedial teaching: Extra attention will be paid towards slow writers. They will be given hands- on activities to understand the Concept thoroughly and easily.

Inclusive practices and full participation without discrimination:

→Group activities

→Sport based activities

→Charts

→books

→Collaboration

## **L - 11 Decimal I**

## **L - 12 Decimal II**

Concept 11.1 Like and unlike decimals

11.2 Compare

11.3 Add and Subtract

12.1 Multiply and Divide decimals

12.2 Percentage

Learning Outcomes:-

Knowledge Objectives:- Students will be able to Convert fractions to decimals and vice versa. Converting unlike decimals to like decimals.

Understanding objectives: Students will understand the concept of decimal value, chart and expanding the decimal numbers.

Application objectives: Students will be able to Convert fractions into decimals, the relationship between percentage, decimals and fractions.

Skill objectives: Students can use multiplying decimals by 10, 100 and 1000 in their daily life problems.

P. K. testing: Simple questions related to decimals like place value / Face value will be asked.

a) write in expanded form 86.293

b) write the place/face value of underlined digit 436.293

Teaching aids: Chalk duster, green board, Smart board, ebooks etc.

Pedagogical Strategies: Teacher will explain how to write decimals In words, Place / Face value, equivalent like and unlike decimals, add sub of decimals. multiply decimals by 10, 100 & 1000, the relationship between percentage decimals and fractions by Showing Modules to smart class. Activity method will be used to make the concept more clear to the students.

Thousands	Hundreds	Tens	Ones	Decimal point	Tenths	Hundredths	Thousandths
1	4	3	6	0	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

When two decimal numbers are multiplied,

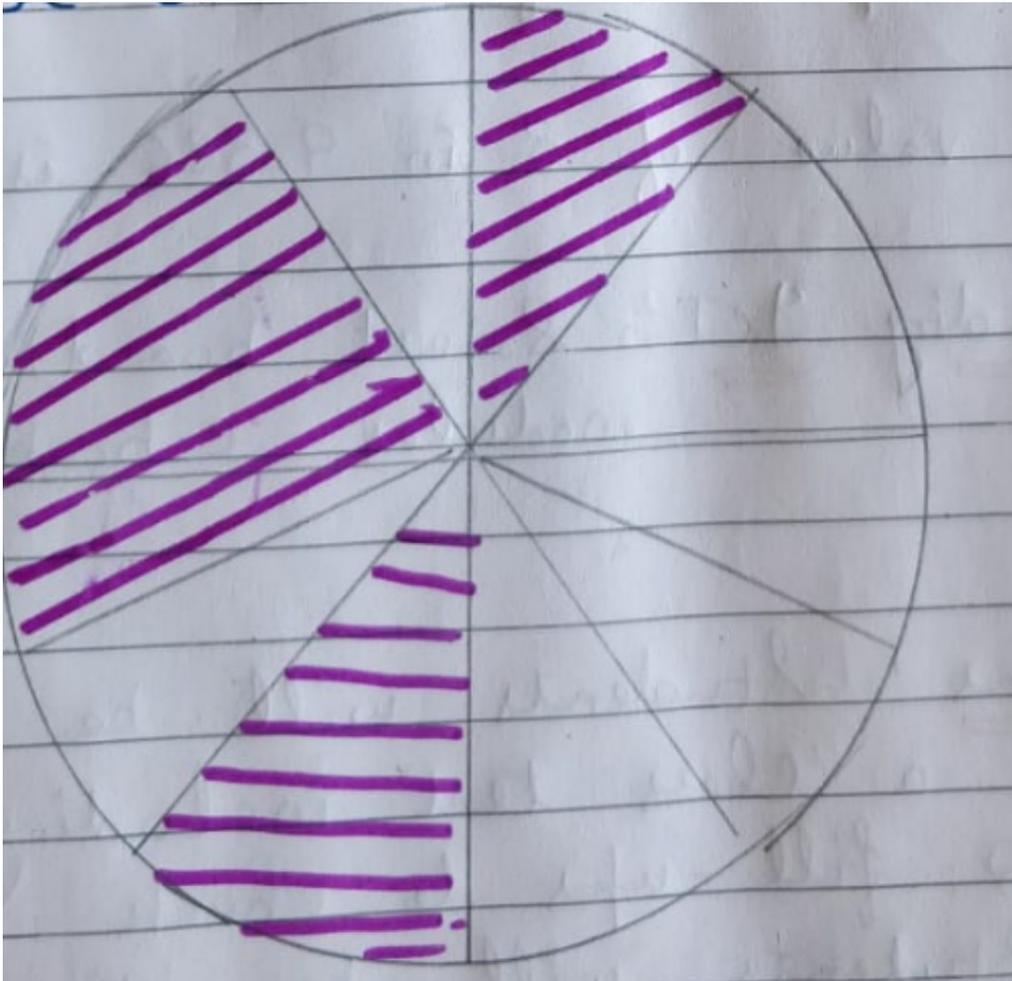
a) **count** the **total number of digits after decimal point** in both the numbers. Say it is 'n'.

b) **multiply** the **two decimal numbers** as usual and place the **decimal point** in the product **after 'n' digits** from the right.

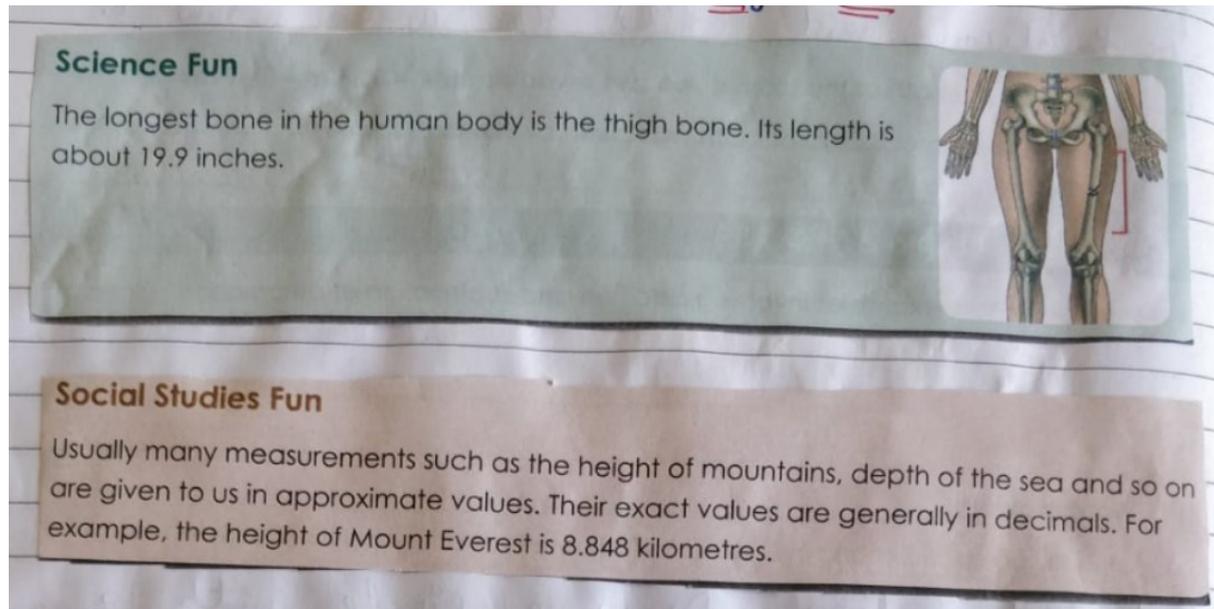
Group Activity: Students will perform a group activity in which they will show how can they convert decimal into fraction, fraction into decimals, percentage into fraction and decimals by giving the following table. One child gives answer decimal to fraction, next child gives answer how to convert fraction into percent and so on.

S.No	Decimal	Fraction	Percent
a)	1.5		
b)		$\frac{8}{10}$	
c)			26%
d)		$\frac{18}{100}$	
e)	0.65		

Art Integration: Draw a circle with 10 equal parts. Colour three fractions red and 7 parts not coloured. Now, we can write coloured portion as  $\frac{3}{10}$  or 0.3 and portion that is not coloured can be written as  $\frac{7}{10}$  or 0.7



Interdisciplinary Linkage and infusion of Life Skill:



Recapitulation: a) Divide 60.72 by 12

b) Arrange in ascending order

0.66, 0.6, 0.606, 0.666, 0.066

c) Write in expanded form 98.072

d) The place value of 8 in 9.386 is \_\_\_\_

Resources including ICT: Smart board, charts modules, ebooks, Youtube

Assessment items: Students will be given a class test including Short questions, M.C.Q, fill-ups to check their understanding. Students will be given 5 questions daily for more practice.

Feedback and remedial teaching: Extra attention will be paid towards slow learners and work students. They will be given hands- on activities to understand the concept thoroughly and easily.

Inclusive learning and full participation without discrimination:

→group activities.

→Sport based activities.

→Charts

→books

→Collaboration

## L-13 Measurements

Concept 13.1 Perimeter, Area and Volume

Learning outcomes:-

Knowledge objectives: Students will be able to know the Perimeter of a rectangle and a square, Volume of Cube and Cuboid.

Understanding objectives: Students will be able to understand all units of length, and Difference between area, perimeter and volume.

Application objectives: Students will be able to apply their knowledge to real world problems.

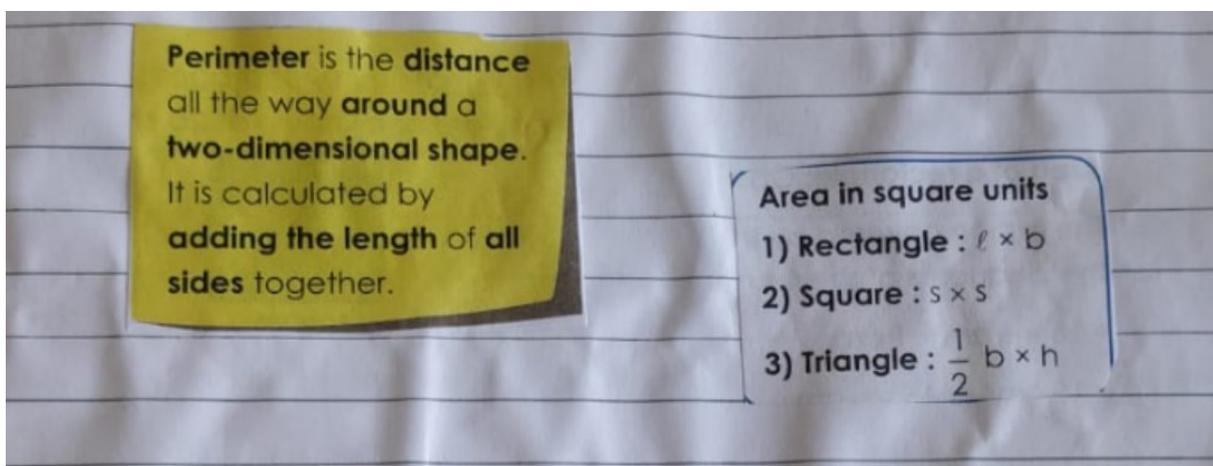
Skill objectives: Students will be able to define and Calculate the Perimeter, area and volume of 2D and 3D shapes.

P. R. testing: Following questions will be asked

- a) what is a rectilinear figure?
- b) what is Perimeter?
- c)  $4+4+4+4 = 4 \times 4$

Teaching aids: white board, Grid paper, measuring tape, cut out shapes (square, rectangle, Triangle, cube, cuboid), chart, etc.

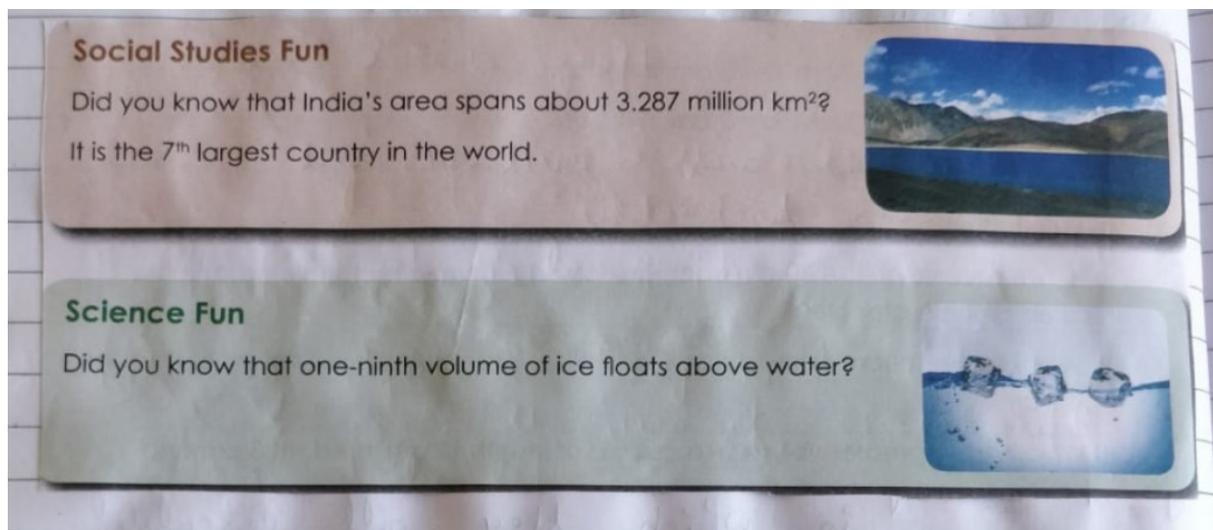
Pedagogical Strategies: Teacher will explain how to find Perimeter, area and volume by showing modules In Smart Class. Activity method will be used to make the Concept more clear to the students. It will also help them develop their spatial awareness and problem solving skill. Formulas to find Perimeter, area and volume will be explained.



Group activity: Students will do an activity in which they will calculate the area of a leaf using 1 cm x 1 cm square grid. Students will Count the no of complete squares with (✓) and the more than half square by (X). To calculate the approximate area, we add the no. of Complete and more than half squares occupied by the object on the grid. Note that half and less than half squares are discarded.

Art integration: Art integration can be a great way to engage students in Learning Concepts like area, Perimeter and Volume. Students can create geometric art by using shapes to make patterns and designs. This can reinforce their understanding of area and Perimeter as they calculate the measurements of the shapes they use. Students can develop a deeper understanding of these concepts while also having fun and exploring their creative sides.

Interdisciplinary Linkage and infusion of Life Skill:



Recapitulation:- a) Find the volume of a Cube where each edge measures 8 cm.

b) Find the perimeter of a square each of whose sides measure 16cm.

c) How many blocks each 25cm long and 12cm wide will be required to lay a path 12.5cm long and 4.8 cm wide ?

Resources including ICT: Smart board, black board videos, charts, modules. You tube etc.

Assessment Items: Students will be given a class test including short questions, Fill-ups. M.c.Q, True False to check will be their understanding. Daily 5-6 Sund given for more practice.

Feedback and remedial teaching: Extra attention will be paid towards slow learners or weak students. They will be given hard activities to Understand the concept thoroughly and easily.

Inclusive learning and full participation without discrimination:

→ group activities

→ charts

→ books

→ Collaboration

→sports based activities.

## **L - 14 Data Handling**

### Concept 14.1 Circle Graphs (Inquiry based)

Learning outcomes:-

Knowledge objectives:- To make them acquainted with the knowledge of the term 'Circle graph

Understanding objectives: Students will Understand the meaning and purpose of circle graph

Application objectives: They will understand the use of circle graph in their daily life.

Skill objectives: They will develop the skill to read and interpret and Construct circle graphs.

P. K. testing: 1) Have they seen circle graph ?

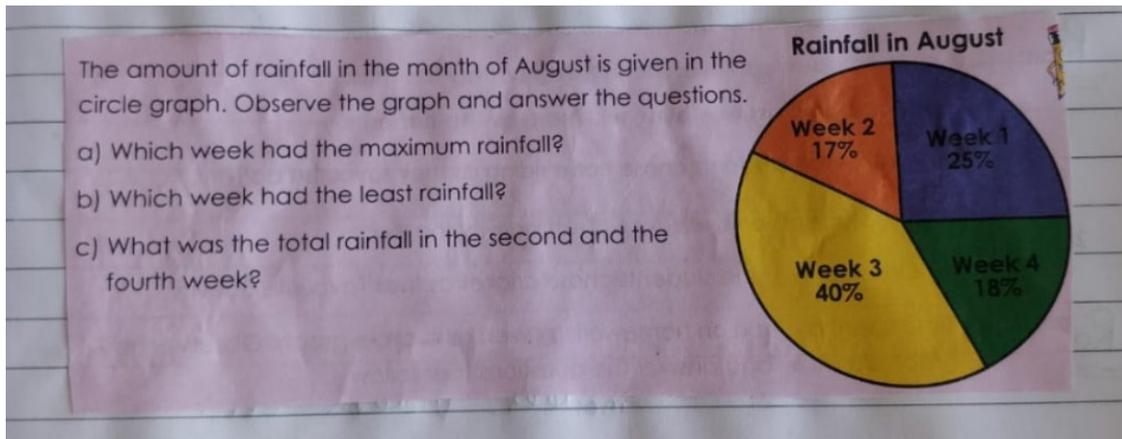
2) Do you know the meaning of circle graph

3) What is the other name of circle graph?

Teaching aids: Pencils, white board, circle graph handouts, Colourful Construction paper, scissors, glue.

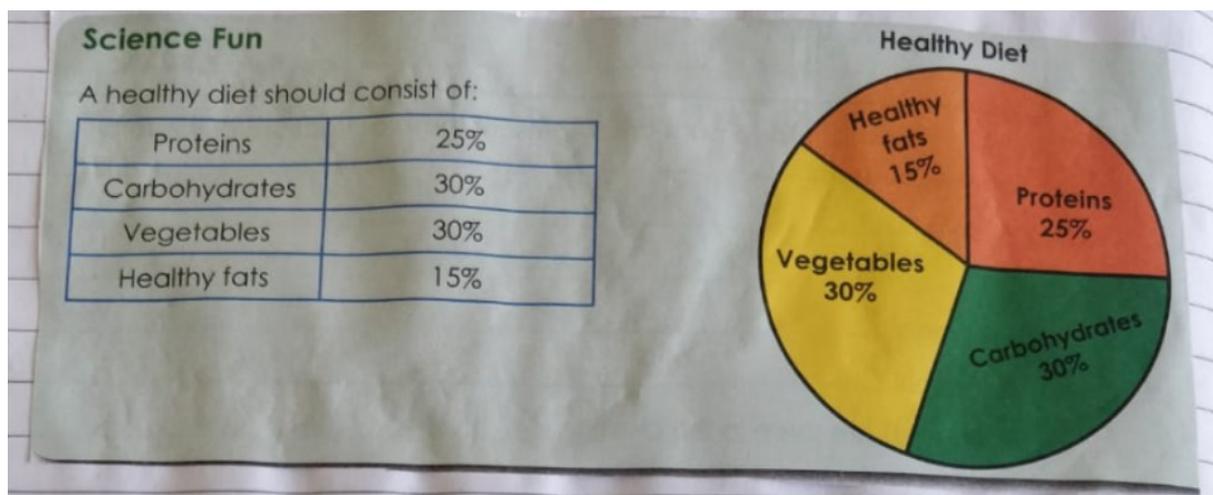
Pedagogical Strategies: Teacher will explain the meaning of a circle graph. The teacher will explain that a circle graph is a type of graph that shows information as parts of a circle. Teacher will explain this topic by showing by Smart board and doing acts as in the classroom or in Maths Lab.

Group activity: Students will perform a group activity in which they will be asked to find the the amount of rainfall in the month of August and answer the questions



Art integration: Circle graph can be Integrated into art in a Variety of ways. Students can create collage using circle graph, Can use graphs to represent data in a painting instead of using traditional bar graphs or live graphs into a painting to represent data. They can make a Sculpture using circle graphs. Use wire or other materials to create a 3-D circle graph sculpture.

Interdisciplinary Linkage and infusion of Life Skill:



Recapitulation: For checking their Concept Understanding teacher will ask some questions.

- 1) What is a circle graph?
- 2) Is bar graph and circle graph the same?

Resources including ICT: Smart boards, charts, models, videos etc.

Assessment: Students will be given one circle graph to check their Understanding.

Inclusive learning and full participation without discrimination:

- Charts
- Modules
- Videos
- hand on activities.