

DELHI POLICE PUBLIC SCHOOL

SCHOLASTIC SYLLABUS

SESSION 2024-25

CLASS IV- MATHS – TERM 1

APRIL 2024	TOPIC AND SUBTOPICS
<p><u>VALUE/OBJECTIVES</u></p> <ul style="list-style-type: none">• Develop proper understanding of the number system.• Help students observe large numbers and express them in words and numerical form.• Recognize the numbers by their place value and face value.• Make comparisons and build numbers. <p><u>LEARNING OUTCOME</u></p> <ul style="list-style-type: none">• To develop an understanding of Periods, Places.• To acquire the knowledge of expanding numbers.	<p><u>Unit - 1: NUMBERS</u></p> <ul style="list-style-type: none">• Indian Place Value System• 6 and 7- digit numbers• Face value, Place value• Predecessor and successor• Compare and Order• Expand and Build numbers 
	<p><u>ACTIVITY</u></p> <ul style="list-style-type: none">• Use of Abacus to form large numbers• Use number meter and cards

MAY 2024

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit – 1)

- Help students get familiarized with the ancient number systems and understand the usage of Roman numerals.
- Comprehend rules and learn to convert from one system to another.

(Unit – 13)

- Observe surroundings and identify patterns in different objects.
- Analyze the pattern in a set of numbers and continue the series.
- Draw patterns of their own.

LEARNING OUTCOME

- To understand the rules of writing Roman numbers upto 500.
- Develop numeracy skills.
- Ability to make logical connections and use reasoning skills.

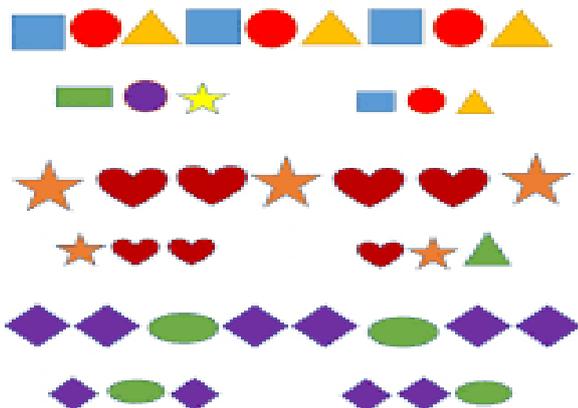
Unit – 1: NUMBERS (continued)

- Symbols for Roman Numbers
- Writing Roman numbers till 500
- Conversions between Roman and Hindu-Arabic numerals
- Simple addition and Subtraction



Unit – 13: PATTERNS

- Patterns all around us
- Patterns in Addition and Subtraction
- Patterns in Multiplication and Division
- Tessellations



ACTIVITY

- Prepare a 3x3 grid of Roman numbers from 1 -9 and cross out numbers when called.
- Cut out a shape and make tessellations.

JULY 2024

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit – 2)

- Develop understanding of arithmetic operations and techniques.
- Explore the relationship between operations.

LEARNING OUTCOME

- Apply property of operations
- Identify and use operations to solve word problems

VALUE/OBJECTIVES

(Unit – 7)

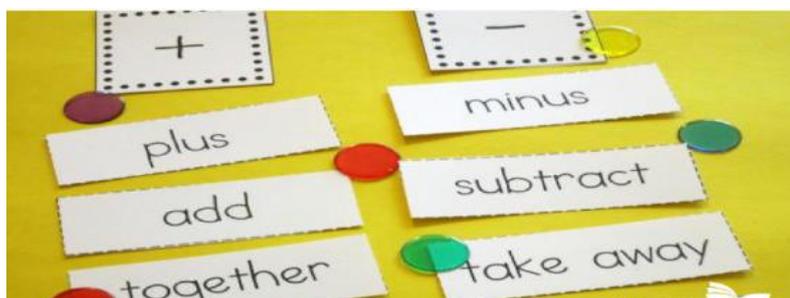
- Able to collect, record and interpret data.
- Express the data in pictorial form.
- Read and draw inferences from a bar graph.

LEARNING OUTCOME

- Represent tabular data in form of pictorially..
- Able to collect, record and interpret data by using real life examples.

Unit 2 -: ADDITION AND SUBTRACTION OF NUMBERS

- Properties of Addition and Subtraction
- Adding & Subtracting 6 and 7- digit numbers
- Relationship between addition and subtraction
- Applications to real life



Unit 7: DATA HANDLING

- Data collection and organization
- Tally marks and Tabular form of data
- Reading and Drawing a Pictograph
- Reading a Bar graph

One  represents 10 Trees	
Name	Number of Trees
Apple	
Peach	
Guava	
Pear	

ACTIVITY

- Estimating the sum of odd and even numbers.
- Making 100's and 1000's
- Conduct a survey and represent the data graphically

AUGUST 2024

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit - 3)

- Develop understanding of arithmetic operations and techniques
- Improve analytical and numerical skills.

VALUE/OBJECTIVES

(Unit - 4)

- Understand the rules and properties of arithmetic operations and apply them to solve problems in real life situations

LEARNING OUTCOME

- Identify appropriate operation and apply the concepts to real life situation.
- Develop understanding of arithmetic operations and techniques and improve analytical and numerical skills.

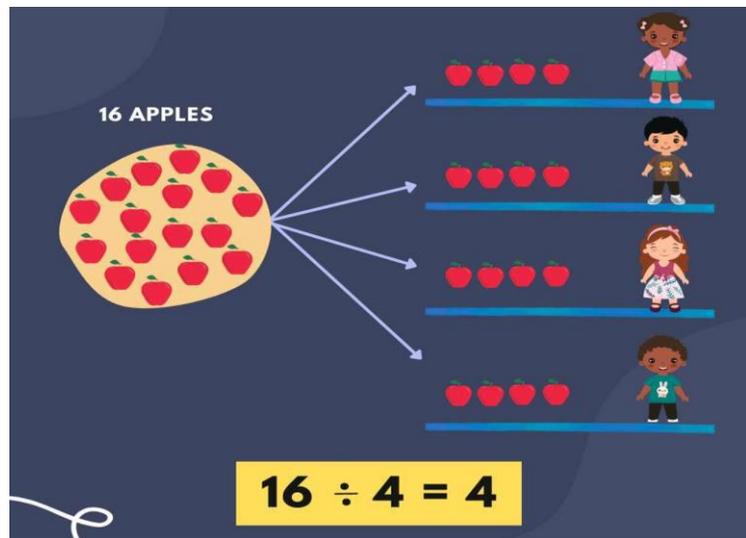
Unit - 3: MULTIPLICATION

- Properties of Multiplication
- Multiplication by 10's, 100's, 1000's
- Multiplication by 2- and 3-digit numbers

$6 \times 1 = 6$	$7 \times 1 = 7$	$8 \times 1 = 8$	$9 \times 1 = 9$	$10 \times 1 = 10$
$6 \times 2 = 12$	$7 \times 2 = 14$	$8 \times 2 = 16$	$9 \times 2 = 18$	$10 \times 2 = 20$
$6 \times 3 = 18$	$7 \times 3 = 21$	$8 \times 3 = 24$	$9 \times 3 = 27$	$10 \times 3 = 30$
$6 \times 4 = 24$	$7 \times 4 = 28$	$8 \times 4 = 32$	$9 \times 4 = 36$	$10 \times 4 = 40$
$6 \times 5 = 30$	$7 \times 5 = 35$	$8 \times 5 = 40$	$9 \times 5 = 45$	$10 \times 5 = 50$
$6 \times 6 = 36$	$7 \times 6 = 42$	$8 \times 6 = 48$	$9 \times 6 = 54$	$10 \times 6 = 60$
$6 \times 7 = 42$	$7 \times 7 = 49$	$8 \times 7 = 56$	$9 \times 7 = 63$	$10 \times 7 = 70$
$6 \times 8 = 48$	$7 \times 8 = 56$	$8 \times 8 = 64$	$9 \times 8 = 72$	$10 \times 8 = 80$
$6 \times 9 = 54$	$7 \times 9 = 63$	$8 \times 9 = 72$	$9 \times 9 = 81$	$10 \times 9 = 90$
$6 \times 10 = 60$	$7 \times 10 = 70$	$8 \times 10 = 80$	$9 \times 10 = 90$	$10 \times 10 = 100$

Unit - 4: DIVISION

- Properties of Division
- Division by 10's, 100's, 1000's
- Division by 2- and 3-digit numbers
- Introduction to Unitary method



ACTIVITY

- Learning Multiplication Tables
- Short cuts to multiplication
- Division by Grouping and Repeated Subtraction

SEPTEMBER 2024

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

- Hone mathematical skills to solve simple numerical questions.
- Develop visual, spatial and problem-solving skills.

LEARNING OUTCOME

- Manage time more effectively
- Feel equipped to approach exams with less anxiety and stress

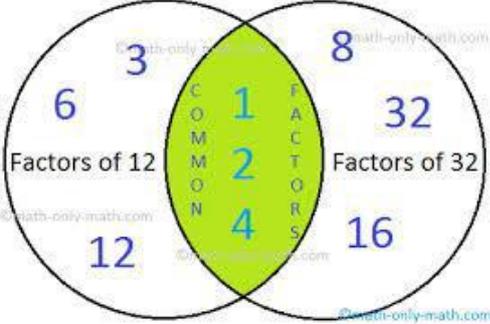
REVISION OF TOPICS LEARNT



MID TERM EXAMS



CLASS IV- MATHS – TERM 2

OCTOBER 2024	TOPIC AND SUBTOPICS
<p style="text-align: center;"><u>VALUE/OBJECTIVES</u></p> <p style="text-align: center;">(Unit – 5)</p> <ul style="list-style-type: none">• Identify numbers as prime and composite.• Understand the relationship between factors and multiples.• Develop problem solving skills involving factors and multiples• Learn rules of divisibility specifically for numbers 2 to 9 and to determine if the test based on rule works. <p style="text-align: center;"><u>LEARNING OUTCOME</u></p> <ul style="list-style-type: none">• Identify numbers as prime and composite.• Understand the relationship between factors and multiples.• Develop problem solving skills involving factors and multiples	<p style="text-align: center;"><u>Unit - 5: MULTIPLES AND FACTORS</u></p> <ul style="list-style-type: none">• Properties of multiples and factors• Prime and composite numbers• Prime factorization• Common multiples and factors• LCM and HCF• Relationship between LCM, HCF and product.• Divisibility rules <div style="text-align: center;"><p>A Venn diagram with two overlapping circles. The left circle is labeled 'Factors of 12' and contains the numbers 3, 6, and 12. The right circle is labeled 'Factors of 32' and contains the numbers 8, 16, and 32. The overlapping area is shaded green and labeled 'COMMON FACTORS' and contains the numbers 1, 2, and 4.</p></div>
	<p style="text-align: center;"><u>ACTIVITY</u></p> <ul style="list-style-type: none">• Establish relationship between HCF, LCM and product of numbers• Venn Diagram to find LCM and HCF

NOVEMBER 2024

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit – 6)

- Familiarize with basic terms used in Geometry.
- Use instruments to measure and draw segments and circles.
- Apply spatial reasoning to name figures according to specifications

LEARNING OUTCOME

- Develop visual, spatial and problem-solving skills.

VALUE/OBJECTIVES

(Unit – 8)

- Read, write and identify fractions.
- Form equivalent fractions as per given directions.
- Learn to use fractions in real-life situations.

LEARNING OUTCOME

- Read, write and identify fractions.
- Learn to use fractions in real-life situations.

Unit - 6: GEOMETRY

- Point, ray, line, segment, angle, circle
- Types of angles and polygons
- Types of triangles and quadrilaterals



ACTIVITY

- Use paper folding to make geometrical figures

Unit - 8: FRACTIONS

- Types of fractions
- Making Equivalent fractions
- Conversion between mixed and improper fractions
- Writing a fraction in lowest terms
- Comparison and ordering
- Addition and subtraction



ACTIVITY

- Representing fractions using paper strips
- Use a fraction disc

DECEMBER 2024

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit - 14)

- Understand the relationship between perimeter and area and recognize and apply in real-life applications

LEARNING OUTCOME

- To enhance student knowledge of measurement
- Determine perimeter and area of assorted shapes

VALUE/OBJECTIVES

(Unit – 9)

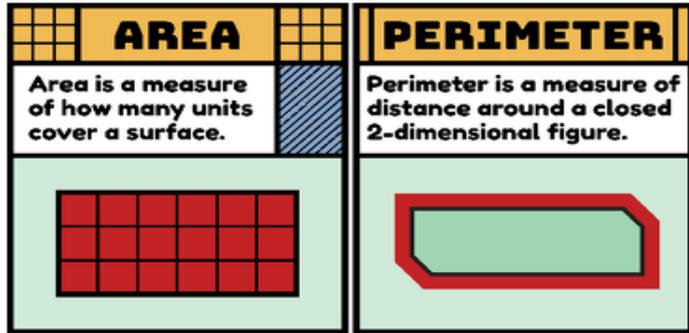
- Understand the meaning of decimals
- Identify similarities and differences between numbers and decimals
- Become aware of the purpose of using decimals.

LEARNING OUTCOME

- Identify the purpose of using decimals.
- Recognize connections between Decimal numbers and Place values

Unit - 14: PERIMETER AND AREA

- Perimeter and area of regular figures
- Perimeter and area of a square and rectangle
- Applications to real life

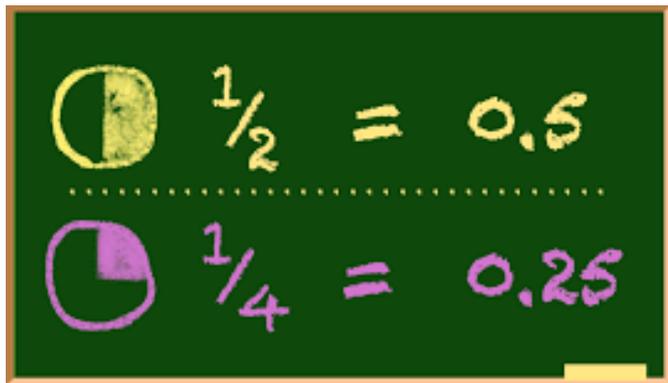


ACTIVITY

- Find perimeter of objects around you
- Compare areas if the perimeters are equal

Unit - 9: DECIMALS

- Place values and reading a decimal
- Ordering decimals
- Conversion between fractions and decimals
- Addition and Subtraction of decimals



ACTIVITY

- Representation of a decimal on a grid

JANUARY 2025

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit – 12)

- Role of money in our day-to-day life. Learn about the different uses of money (earning, spending and saving).

LEARNING OUTCOME

- Students will be able to handle cash and carry out age-appropriate transactions.
- Relate the value of money to personal consumption.

VALUE/OBJECTIVES

(Unit11)

- Able to read time, understand the breakdown of hours into minutes.
- Select appropriate tools to solve real-life problems related to time.
- Appreciate the concept of time with Calendar

LEARNING OUTCOME

- Techniques to help students manage their time more effectively.

Unit - 12: MONEY

- Conversion between Rupee and Paise
- Operations on Money
- Word problems
- Currency of other countries



ACTIVITY

- Studying an electricity bill
- Mock shop

Unit - 11: TIME

- Conversions between units of time
- 12 and 24-hour clock
- Addition and subtraction of time
- Calendar



ACTIVITY

- Reading and showing time on clocks
- Making a sun dial

FEBRUARY 2025

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

(Unit 10)

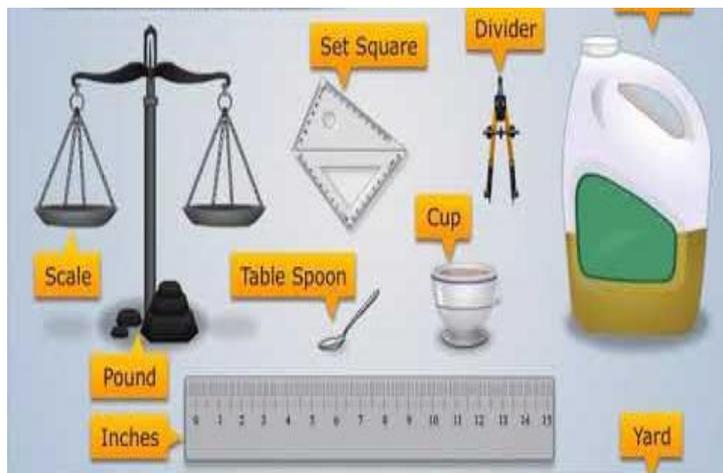
- Select the right measuring tools and apply the learnt skills in day-to-day life situations
- Draw inferences from the given information to nurture critical thinking and problem solving

LEARNING OUTCOME

- Develop measurement skills
- Ability to describe the world around us in accurate, standard ways that others can understand.

Unit - 10: MEASUREMENT

- Units of measurement of length, mass and capacity
- Conversion of measures
- Addition, subtraction, multiplication and division of measures



ACTIVITY

- Using tools of measurement

MARCH 2025

TOPIC AND SUBTOPICS

VALUE/OBJECTIVES

- Students will be able to refine and hone their learning skills and shall be able to perform better in the Annual assessment

LEARNING OUTCOME

- Manage time more effectively
- Feel equipped to approach exams with less anxiety and stress

REVISION

Revision worksheets will be given.



ANNUAL EXAMS

