

DR.M.K.K. ARYA MODEL SCHOOL
CLASS VII SYLLABUS (2017-18)
SUBJECT – MATHS

Syllabus to be completed from April to September

1. Integers
2. Fractions and Decimals
3. Data Handling
4. Simple Equations
5. Lines and Angles
6. The Triangle and its Property
8. Comparing Quantities
14. Symmetry

APRIL

Week 1(6 April to 7 April) :Basics of Mathematics

Week 2 (10 April to 15 April):**CHAPTER 1- INTEGERS** : Meaning and comparison of Integers , Addition and Subtraction of Integers

Week 3(17 April to 22 April) :Multiplication and Division of Integers , Properties of Integers .

CHAPTER 2-FRACTIONS AND DECIMALS : Types of Fractions , Ordering of Fractions .

Week 4(24 April to 29 April) : Addition and subtraction of Fractions,Multiplication and Division of Fractions .

MAY

Week 1 (1 May to 6 May) : **DECIMALS** : Addition and Subtraction of Decimals , Conversion of units using Decimals ,

Week 2(8 May to 12 May) : Multiplication and Division of Decimals

Week 3(15 May to 20 May) : **CHAPTER 3- DATA HANDLING** : Mean , Median , Mode and Range .

Week 4(22 May to 27 May) : Read and Draw Bar graph , Chance and Probability

JULY

Week 1 (3 July to 7 July): **CHAPTER 4- SIMPLE EQUATIONS** : Definition , Formation of Equation , Solution of Simple equations , Solution of Mixed equations.

Week 2 (10 July to 15 July) : From Solution to Equation , Applications of simple equations to Practical situations.

Week 3 (17 July to 22 July): **CHAPTER 5- LINES AND ANGLES** : Concept of Line , Line segment and Ray , Concept of Linear pair of angles ,Adjacent angles and Vertically Opposite angles , Concept of Complementary and Supplementary angles .

Week 4 (24 July to 29 July): Pairs of lines: Intersecting lines , parallel lines , Angles formed by a Transversal
CHAPTER 14-SYMMETRY : Line symmetry . Rotational Symmetry .

AUGUST

Week 1(1 August to 5 August) : **CHAPTER 6- THE TRIANGLES AND ITS PROPERTIES**:Triangles , Classification of Triangles . Concept of Median and Altitude of Triangles

Week 2(8 August to 11 August):Properties of Triangles : Exterior angle property of Triangles Angle sum property of Triangle .

Week 3 (16 August to 19 August):Properties of Isosceles Triangle and Equilateral triangle ,Triangle Inequality , Pythagoras property .

Week 4 (21 August to 26 August) : **CHAPTER 8-COMPARING QUANTITIES** : Ratio , Equivalent Ratios , Proportion , Percentage , Profit and Loss, Simple Interest.

Week 5 (28 August to 31 August): Revision

LAB MANUAL WORK :

1. Activity on Multiplication of Decimals.
2. Activity on Graphical representation of data.
3. Complementary Angles, Supplementary Angles, V.O.A.
4. Corresponding Angles, A.I.A., Interior Angles (Parallel lines and Transversal).
5. Centroid and Orthocentre of different types of Triangles.
6. Exterior angle property, A.S.P.
7. Isosceles triangle property, Triangle Inequality, Pythagoras Theorem.
8. Conversion Scale .

9. Symmetry

SEPTEMBER

Half Yearly Examinations.

Syllabus to be completed from October to December

7. Congruence of Triangles
9. Rational Numbers
10. Practical Geometry
11. Perimeter and Area
12. Algebraic Expressions
13. Exponents and Powers
15. Visualising Solid Shapes

OCTOBER

Week 1 (3 October to 7 October) : **CHAPTER 9-RATIONAL NUMBERS:** Important Properties of Rational Numbers. Standard form of Rational numbers, Representation of Rational number on number line, Comparison of Rational numbers.

Week 2 (9 October to 14 October) : Addition and Subtraction of Rational number, Multiplication and Division of Rational Numbers.

Week 3 (16 October to 18 October) : **CHAPTER 10-PRACTICAL GEOMETRY:** Construction of parallel line , Construction of Triangles when three sides are given , Construction of Triangles when two sides and included angle is given.

Week 4 (23 October to 28 October) : Construction of Triangles when two angles and included side is given, Construction of Right Triangles.

NOVEMBER

Week 1 (2 November to 4 November) : **CHAPTER 11-PERIMETER AND AREA:** Area of Rectangle and Square, Area of Rectangular path and Compounded figures, Area Of Cross Roads.

Week 2 (6 November to 10 November) : Area of Parallelograms, Area of Triangles , Area of a circle.

Week 3 (13 November to 18 November) : **CHAPTER 12-ALGEBRAIC EXPRESSIONS :** Algebraic Expressions , Terms of Expressions , Addition of algebraic expressions

Week 4 (23 November to 28 November) : Subtraction of Expressions , Multiplication of Expressions , Division of Expressions , Simplification of Expressions ,

DECEMBER

Week 1 (1 December to 8 December) : **CHAPTER 7-CONGRUENCE OF TRIANGLE :** Meaning of Congruent Triangle , Condition of Congruence of Triangles

Week 2 (11 December to 16 December) : Application of Congruence condition of Triangles

Week 3 (18 December to 23 December) : **CHAPTER 13-EXPONENTS AND POWERS :** Exponential form , Laws of Exponents .

Week 4 (26 December to 30 December) : Application of laws of exponents , Scientific Notation of Large numbers . **CHAPTER 15- VISUALISING SOLID SHAPES:** Nets of 3D shapes , Sketches of 3D Shapes , Viewing different sections of a solid

LAB MANUAL WORK :

1. (a) Diagonal property of a parallelogram.
(b) All the congruent triangles are equal in area but not the converse.
2. Congruent Triangles.
3. The circumference – diameter ratio of a circle .
4. Area of Parallelogram.
5. Area of Circle.
6. To find surface area and volume of shapes made up of unit cubes.
7. Euler's Formula
8. Three dimensional figures on isometric sketches.

JANUARY :

REVISION

FEBRUARY

FINAL EXAMINATION