

D.P.S.MATHURA ROAD

FORTNIGHTLY SYLLABUS FOR CLASS VIII MATHEMATICS (2018 - 2019)

| S. No. | Fortnight | Topic | Days | Sub-Topics | Total No: of periods | Peroids Alloted | Assignment | Mon. Test | Activities |
|--------|-------------------------|---|------|---|----------------------|-----------------|------------|-----------|--|
| 1 | 2nd April - 13th April | CH 1 - Rational Numbers | 11 | Introduction, Properties of rational nos. | 15 | 3 | | | |
| | | | | Number line. | | 2 | | | |
| | | | | Rational numbers between rational number. | | 2 | | | |
| | | CH-2, Introduction, Solving equations which have linear expression on one side and a no: on the other side. | | 2 | | | | | |
| | | Some applications as problem sums (contd.) | | 3 | | | | | |
| | | Ass. Booklet CH - 1 Including Extended Learning | | 3 | | | | | |
| 2 | 16th April - 27th April | Ch2 - Linear Equations in 1 Variable (continue) | 11 | Solving equations which having the variables on both sides. | 15 | 3 | | | |
| | | | | Applications as problem sums. | | 3 | | | |
| | | | | Reducing equations to simpler form. | | 3 | | | |
| | | | | Equations reducible to linear form. | | 3 | | | |
| | | | | Ass. Booklet CH - 2 Including Extended Learning | | 3 | | | |
| 3 | 1st May - 18th May | CH 3 - Understanding Quadrilaterals | 14 | Ch 3 Polygons, it's types properties | 18 | 3 | | | ACTIVITY 1 To verify that the sum of the measures of the Exterior angles of any polygon is 360 degree by paper cutting and pasting |
| | | | | Sum of measures of exterior angles of a polygon. | | 3 | | | |
| | | | | Kinds of quadrilaterals | | 4 | | | |
| | | | | Some special Parallelograms. (contd) | | 3 | | | |
| | | | | Ass. Booklet CH - 3 Including Extended Learning | | 3 | | | |
| | | | | ACTIVITY 1 | | 2 | | | |

PTM on 12th May 2018

Summer Vacations from 19th May to 1st July 2018

Activity 2 - On Exploring Properties Of Quadrilaterals As Summer Vacation Holiday Home Work

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| 4 | 2nd July - 13th July | CH 6- Squares and Square Roots | 10 | CH-6-Introduction, Properties of Square numbers. | 14 | 1 | 17/7/18 Term I Assignment 1 Cycle 1 from Ch - 2, Ch - 3 | | |
| | | | | Some more interesting patterns. | | 2 | | | |
| | | | | Pythagorean triplets | | 2 | | | |
| | | | | Finding unit digit of square number Square roots by repeated subtraction,making perfect square number | | 3 | | | |
| | | | | Square root by long division | | 3 | | | |
| | | | | Ass. Booklet CH - 6 Including Extended Learning | | 3 | | | |
| 5 | 16th July - 31st July | CH 6- Squares and Square Roots (Cont) | 13 | Square roots of decimal numbers | 17 | 4 | Periodic Assesment - 1 on 30/07/18 Syllabus: Ch-2, Ch -3 | ACTIVITY 3 A) Draw the front view, top view and side view of cubes using Dot paper. B) Eulers verification formula worksheet. C) Map reading sheet | |
| | | | | Square root by Estimation | | | | | |
| | | | | Introduction, view of 3D shapes | | 1 | | | |
| | | | | Mapping space around us. | | | | | |
| | | | | Describing polyhedron, counting of Faces, Edges & Vertices | | 2 | | | |
| | | | | Euler's formula and its application | | 4 | | | |
| | | | | ACTIVITY 3 | | 2 | | | |
| | | | | Revision for the test on 30/07/18 | | 4 | | | |

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| 6 | 1st August - 18th August | CH - 9 Algebraic Expressions and Identities | 13 | What are expressions, Terms, Factors & Coefficients. | 17 | 1 | | | Activity 4 based on Algebraic Expressions and Identities |
| | | | | Monomials, Binomials, Polynomials | | 2 | | | |
| | | | | Like and Unlike Terms | | 2 | | | |
| | | | | Addition and Subtraction of Algebraic Expressions | | 3 | | | |
| | | | | Multiplication of Algebraic Expressions | | 4 | | | |
| | | | | Multiplication of Monomial by Monomial | | 3 | | | |
| | | | | Multiplication of a monomial by a polynomial & Multiplication of polynomial | | 2 | | | |
| | | | | What is identity? | | 3 | | | |
| | | | | Standard identities and application | | 2 | | | |
| | | | | Ass. Booklet CH - 9 Including Extended Learning | | | | | |
| ACTIVITY 4 | | | | | | | | | |
| 7 | 20th August - 4th September | CH - 5 Data Handling | 10 | CH 5 Introduction (discussing various method of statistics for drawing graph) | 14 | 2 | 23/8/18 Term I Assignment 2 Cycle 1 from CH - 6, Ch -10, CH - 9 | | (Group Activity -5) (A) Collect a data of time spent by the students during a day under the given headings and represent it using a pie chart (B) Draw a histogram representing the the time spent more than 4 hours in watching TV of the whole class. |
| | | | | Making a grouped frequency distribution table using tally marks | | 2 | | | |
| | | | | Drawing of Histogram | | 3 | | | |
| | | | | Circle graph or Pie Chart. | | 2 | | | |
| | | | | Chance & Probability. | | 3 | | | |
| | | | | Ass. Booklet CH - 5 Including Extended Learning | | 2 | | | |
| | | | | ACTIVITY - 5 | | | | | |

Completion of syllabus on 4thth Sept 2018

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|--|--------------------------------|----------|---|--|---|--|--|--|--|
| | 6th September - 11th September | Revision | 5 | | 7 | | | | |
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Mid - Term Exams from 12th September to 22nd September,2018

PTM - 13th October 2018

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| 8 | 24th September - 17th October | CH-8 Comparing Quantities | 17 | Recalling Ratios & Percentages. | 24 | 3 | | | |
| | | | | Finding the increase or decrease percent. | | 2 | | | |
| | | | | Finding discounts | | 2 | | | |
| | | | | Prices related to buying & selling. | | 3 | | | |
| | | | | Sales Tax/VAT. | | 3 | | | |
| | | | | Introduction of CI from SI | | 2 | | | |
| | | | | Deducing a formula for C.I & Amount for rate compounded annually or half-yearly | | 2 | | | |
| | | | | Application of CI, Depreciation | | 4 | | | |
| | | | | Ass. Booklet CH - 8 Including Extended Learning | | 3 | | | |

Dussehra Break 18th October - 21st October 2018

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| 9 | 22nd October - 3rd November | CH - 7 Cube and Cube Roots | 10 | Introduction | 6 | 1 | 25/10/18 Term 2 Assignment 1 Cycle 2 from Ch -8, CH - 7 | | |
| | | | | Patterns | | 1 | | | |
| | | | | Making Perfect Cubes | | 2 | | | |
| | | | | Cube Roots | | | | | |
| | | | | Ass. Booklet CH - 7 Including Extended Learning | | 2 | | | |

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| 9 | 22nd October - 3rd November | CH-11 Mensuration | | CH -11 In introduction recalling the formulae done. | 8 | 4 | | | | |
| | | | | Exercise based on old formulae | | 4 | | | | |
| | | | | Area of trapezium. | | 4 | | | | |
| Diwali Break From 5th November - 11th november 2018 | | | | | | | | | | |
| 10 | 12th November – 30th November | CH-11 Mensuration | 13 | Area of general quadrilateral. | 17 | 3 | | | | |
| | | | | Area of a Polygon. | | | | | | |
| | | | | Solid Shapes.(explanation of TSA and SA) | | | | | | 3 |
| | | | | Surface area of cube, cuboid and cylinder. | | | | | | 4 |
| | | | | Volume of cube, cuboid & cylinder. | | | | | | 4 |
| | | | | Ass. Booklet CH - 8 Including Extended Learning | | | | | | 3 |
| 11 | 3rd December - 15th December | CH - 13 Direct and Inverse Proportions | 11 | Ch-13, Introduction, rules of direct proportion. | 15 | 3 | 4/12/17 Term 2 Assignment 2 Cycle 2 from Ch-8 and CH - 11 | | | |
| | | | | Applications of direct proportion | | | | | | |
| | | | | Rules of inverse proportion. | | | | | | |
| | | | | Applications of In direct proportion | | | | | | 4 |
| | | | | Ass. Booklet CH - 13 Including Extended Learning | | | | | | 4 |
| | | | | Revision for the test on 17/12/18 | | | | | | 4 |

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| 12 | 17th December - 29th December | CH - 4 Practical Geometry | 10 | Construction Of Quadrilateral. | 14 | | Periodic Assesment - 2 on 17/12/18 Syllabus Ch -11, Ch - 8 | | |
| | | | | a) three sides and two diagonal given | | | | | 2 |
| | | | | b) length of 4 sides and one diagonal | | | | | 2 |
| | | | | c) two adj. sides and 3 angles | | | | | 2 |
| | | | | d) three sides and two included angle | | | | | 4 |
| | | | | Some Special Cases of const. | | | | | 4 |
| <u>Winter Break from 31st December to 9th January 2019</u> | | | | | | | | | |
| 13 | 10th Jan - 25th Jan 2019 | Ch - 14 Factorisation | 12 | Introduction :-meaning of factorisation? | 16 | | | | |
| | | | | Taking out common factors | | | | | 3 |
| | | | | Factorization by regrouping | | | | | 2 |
| | | | | Factorization by identities | | | | | 4 |
| | | | | Ass. Booklet CH - 14 Including Extended Learning | | | | | 2 |
| | | | | REVISION | | | | | 5 |

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|--|--|------------------------------------|----|--|----|---|--|--|---|
| 14 | 28th January - 08th february 2019 | Ch - 14 Factorisation (Cont) | 10 | Division of monomial by a monomial | 14 | 4 | | | |
| | | | | Division of polynomial by a monomial | | | | | |
| | | | | Division after factorization | | | | | |
| | | | | Ass. Booklet CH - 14 Including Extended Learning | | | | | |
| | | CH-12 Exponents and Powers | | Introduction of Exponents as recalling | | | | | |
| | | | | Laws of exponents. | | | | | |
| | | | | Use of exponents to express Large number and very small number in standard form. | | | | | |
| | | | | Ass. Booklet CH - 12 Including Extended Learning | | | | | |
| 15 | 11th February - 20th February 2019 | CH-15 Introduction to Graphs | 9 | Introduction | 11 | 1 | | | ACTIVITY 6 Worksheet on Introduction to Graphs and types of Line Graphs |
| | | | | Reading of line graph and drawing it | | | | | |
| | | | | Coordinates on xy plane | | | | | |
| | | | | Reading and drawing of linear graph | | | | | |
| | | | | ACTIVITY - 6 | | | | | |
| | | | | Number in general form, | | | | | |
| | | CH - 16 Playing With Numbers | | Letters for digits, | | | | | |
| | | | | Tests of divisibility for 3,9,5,6 | | | | | |
| <u>Completion of syllabus by 20th February 2019</u> | | | | | | | | | |
| | 21st February – 28 th February 2018 | Revision B50 | 7 | | 10 | | | | |
| <u>Annual Exams from 1 March to 15th March 2019</u> | | | | | | | | | |
| <u>PTM on 30th March 2019 For Class VIII</u> | | | | | | | | | |
| <u>New Session To Begin On 1st April 2019</u> | | | | | | | | | |

CLASS VIII

MATHEMATICS

ACTIVITIES FOR THE SESSION 2018 - 2019

| S.NO | FORTNIGHT NO. | FORTNIGHTS | ACTIVITY |
|------|---------------|------------------------------------|---|
| 1 | 3 | 1st May - 18th May | ACTIVITY 1 To verify that the sum of the measures of the Exterior angles of any polygon is 360 degree by paper cutting and pasting |
| 2 | | SUMMER VACATION | ACTIVITY 2 ON EXPLORING PROPERTIES OF QUADRILATERALS |
| 3 | 5 | 16th July - 31st July | ACTIVITY 3 A) Draw front view , top view and side view of cubes using Dot Paper. (B)Eulers verification formula worksheet. (C) Map reading Sheet |
| 4 | 6 | 1st August - 18th August | ACTIVITY 4 based on Algebraic Expressions and Identities |
| 5 | 7 | 20th August - 4th September | (GROUP ACTIVITY -5) (A) Collect a data of time spent by the students during a day under the given headings and represent it using a pie chart (B) Draw a histogram representing the the time spent |
| 6 | 15 | 11th February - 20th February 2019 | ACTIVITY 6 Worksheet on Introduction to Graphs and types of Line Graphs |

SYLLABUS OF TEST AND TERMS 2018 - 2019

PREODIC ASSESMENT 1

Date: 30/07/18

| | | |
|-----------------|--------|----------------------------------|
| <u>SYLLABUS</u> | CH - 2 | Linear equations in one variable |
| | CH - 3 | Understanding Quadrilaterals |

MID TERM EXAMS

Date: 12th September - 22nd September

| | | |
|-----------------|---------|----------------------------------|
| <u>SYLLABUS</u> | CH - 1 | Rational Numbers |
| | CH - 2 | Linear equations in one variable |
| | CH - 3 | Understanding Quadrilaterals |
| | CH - 5 | Data Handling |
| | CH - 6 | Square and Square roots |
| | CH - 9 | Algebraic Identities |
| | CH - 10 | Visualising Solid Shapes |

PREODIC ASSESMENT 2

Date: 17/12/18

| | | |
|-----------------|---------|----------------------|
| <u>SYLLABUS</u> | CH - 8 | Comparing Quantities |
| | CH - 11 | Mensuration |

ANNUAL EXAMS

Date: 1st March - 15th March

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|-----------------|---------|-------------------------------|
| <u>SYLLABUS</u> | CH - 4 | Constructions |
| | CH - 7 | Cube and Cube roots |
| | CH - 8 | Comparing Quantities |
| | CH - 11 | Mensuration |
| | CH - 12 | Exponents |
| | CH - 13 | Direct and Inverse Proportion |
| | CH - 14 | Factorisation |
| | CH - 15 | Introduction to graphs |
| | CH - 16 | Playing with numbers |