



LAHORE GRAMMAR SCHOOL

55 MAIN

Mathematics Syllabus for Admission into Class 7

1. <u>Place value, ordering and rounding</u>	<ul style="list-style-type: none">• Place value• Rounding• Decimal places• Order of operations
2. <u>Length, mass and capacity</u>	<ul style="list-style-type: none">• Conversions of length• Conversions of mass• Conversions of capacity• Reading scales
3. <u>Integers, powers and roots</u>	<ul style="list-style-type: none">• Integers• Factors and multiples• Prime numbers and prime factors• HCF• LCM• Square roots
4. <u>Coordinates</u>	<ul style="list-style-type: none">• Reading coordinates of points• Plotting coordinates
5. <u>Collecting and displaying data</u>	<ul style="list-style-type: none">• Primary and secondary data collection techniques• Organizing data• Pictogram• Bar graph• Bar-line graph• Pie-chart

6. <u>Fractions, decimals and percentages</u>	<ul style="list-style-type: none"> • Fractions of a quantity • Equivalent fractions • Simplification of fractions • Addition and Subtraction of fractions • Division of fractions • Improper fractions • Changing between mixed numbers and improper fractions • Changing fraction to decimal and percentage • Changing a decimal to a fraction and percentage • Changing percentage to decimal and fraction • Simple percentages of a quantity • Word problems
7. <u>Measurement and construction</u>	<ul style="list-style-type: none"> • Lines and angles • Constructing triangles • Constructing simple geometric figures using protractor and ruler
8. <u>Expressions</u>	<ul style="list-style-type: none"> • Simplifying expressions • Expanding expressions
9. <u>Equations and simple functions</u>	<ul style="list-style-type: none"> • Solving equations with variable on one side • Solving equations with variable on both sides • Word problems • Functions
10. <u>Formulae and substitution</u>	<ul style="list-style-type: none"> • Substitutions into expressions • Substitutions into formulae
11. <u>Sequences</u>	<ul style="list-style-type: none"> • Sequences in diagram • Term to term rules
12. <u>Ratio and proportion</u>	<ul style="list-style-type: none"> • Fractions and ratios • Equivalent ratios • Direct proportion

<u>13. Area and perimeter of rectangles, right angled triangle, trapezium, parallelogram</u>	<ul style="list-style-type: none"> • Area and perimeter • Composite shapes • Word problems
<u>14. Cubes and cuboids</u>	<ul style="list-style-type: none"> • Volume • Surface area
<u>15. Angle properties</u>	<ul style="list-style-type: none"> • Angles on a straight line • Angles around a point • Alternate angles • Corresponding angles • Vertically opposite angles • Angles of a triangle • Angles of a quadrilateral
<u>16. Time</u>	<ul style="list-style-type: none"> • 12-hour clocks • 24-hour clocks • Word problems
<u>17. Probability</u>	<ul style="list-style-type: none"> • Possible outcomes • Equally likely outcome • Mutually exclusive • Experimental probability • Theoretical probability
<u>18. Division and fraction of a quantity</u>	<ul style="list-style-type: none"> • Calculating fractions and decimals of a quantity • Division and remainders • Rounding up or down

