

NORTH SOUTH FOUNDATION
MATH BEE Syllabus
Updated 2023

Level 1 - Grades 1, 2 and 3
Level 2 - Grades 4, and 5
Level 3 - Grades 6,7, and 8

Topic	MB1 (K-3)	MB2 (4-5)	MB3 (6-8)
Arithmetic			
Numbers	X		
Counting	X		
Arithmetic operations	X		
Numbers consisting of multiple digits	X		
Place value	X		
Addition and subtraction of numbers consisting of multiple digits	X		
Ones/Tens/Hundreds/Thousands	X		
Numbers in sequence	X		
Measurement of time, length, and money	X		
Basic concepts of fractions	X		
Comparison of numbers	X		
Word problems (including problems with too much information)	X		
Fractions	X	X	
Addition	X	X	
Subtraction	X	X	
Multiplication	X	X	
Division	X	X	
Decimal numbers	X	X	
Addition	X	X	
Subtraction	X	X	
Multiplication	X	X	
Division	X	X	
Order of operations	X	X	
Volume, Mass, Length	X	X	

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Prime numbers		X	
Percentages		X	
Divisibility		X	
Simple interest calculations		X	
Decimal to fractions and vice versa		X	
Scientific notation of numbers		X	
Elements of algebra		X	
Linear equations with one variable		X	
Consumer math: discounts and markup		X	
Advanced topics in fractions			X
Rounding Off Decimals			X
Squares and Square Roots			X
Ordering the Rational Numbers			X
Ratio and proportions			X
Variations			X
Irrational Numbers			X
Approximating Square Roots			X
Averaging Method			X
Comparing Ratios			X
Mean, Median, and Mode			X
Taking Samples			X
Reasonable Estimates			X
Estimating Products			X
Estimating Quotients			X
Conversion between Systems of Measurement			X
Kilograms and Liters			X
Estimating Averages			X
Geometry			

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Areas and volume	X	X	X
Squares, triangles (types, properties)	X	X	
Pythagoras Theorem		X	
Basic concepts of graphs		X	
Circles and Regular Polygons			X
Advanced topics in Pythagorean Theorem			X
Similar figures			X
Applications of similarity			X
Trigonometric Ratios			X
Applications of Trigonometric Ratios			X
Volume of a Circular Cylinder			X
Volume of a Circular Cone			X
Volume of a Sphere			X
Volume of Prisms and Pyramids			X
Applications of Volume			X
Surface Area			X
Surface Area of a Cylinder			X
Surface Area of a Cone			X
Area of a Sector			X
Surface Area of a Sphere			X
Applications of Surface Area			X
Plans and Elevations			X
Oblique Drawings			X
Elements of coordinate geometry			X
Logic			
Review of sets		X	
Subset and superset		X	
Set operations		X	

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Boolean algebra, venn diagram, logic			X
Probability			
Elements of probability		X	
Algebra			
Factorials			X
Permutations and combinations			X
Pascal's Triangle			X
Combinations and Probability			X
LCM and GCF			X
Applications of GCF and LCM			X
Theory of exponents			X
Introduction to logarithms			X
Absolute Value			X
Equalities and Inequalities Using Absolute Value			X
Solving Equations by Graphing			X
Graphing an Inequality on a Coordinate Plane			X
Graphing Pairs of Inequalities			X
Solving Equations			X
Definition of Linear, Increasing, and Decreasing Functions			X
Applications			X
Solving Pairs of Equations by Graphing			X
Solving Systems of Equations by Substitution			X
Solving Systems of Equations			X
Quadratic equations and inequalities			X