Roundwood Park School Curriculum Map – Maths (YR7)

A curriculum that stimulates curiosity, values diversity and offers challenge.
We help every student to love learning for life, to follow their passions and to reach their full potential.

Year Group 7	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Unit of Work	Sequences Place Value Negative Numbers	Order of Operations Algebraic Expressions Transformation	Number Theory Fractions Percentages	Single Brackets Algebraic Equations	Shape and Angles Ratio and Scale	Area and Perimeter Charts and Averages Nets and Volume
Key Knowledge or Enquiry Question	Generating terms of Sequences from term to term and position to term rules, nth term. Integers and Decimals, Ordering numbers, Powers of 10, Rounding, Converting units. Calculations using negative numbers	BIDMAS Algebraic Notation, Collecting like term, Simplifying Expressions, Substitution Reflection, Rotation, Translate, Tessellations, Symmetry	Prime Numbers, Factors Multiples, Square Number Cube Number, Fraction calculations, Fraction of an amount, Mixed Number calculations, Equivalence percentages fractions and decimals, Percentages of amounts, Express on percentage of another	Expanding single brackets, simplifying expressions with more than one single bracket, Know the difference between an expression and an equation, Solve equations, Solve worded equations, Form equations	Properties of shapes, Angles on a straight line, Angles around a point, Angles in a triangle, Angles in a quadrilateral, Units and measurement, Conversion of metric and imperial measures, Simplifying ratios, Dividing a quantity into a ratio, Scale drawings	Perimeter of 2D shapes, Area of triangles, Area of Quadrilaterals, Area of Composite Shapes, Convert between (cm²) and (m²), Bar charts, Pictograms, Pie charts, Mean, Median, Mode, Range, Names of 3D shapes, Volume and surface area of cuboids, Nets
Concepts	Students will be developing critical thinking skills as we nurture a classroom culture in which mathematical discussions is part of the daily routine. Students will be developing problem solving skills through the more challenging questions in each lesson and are encouraged to work systematically, reason logically and to look for patterns. Students will be encouraged to spend time reflecting upon teacher feedback following end of unit tests home learning or end of term assessments. Where multiple solutions are possible discussion will be encouraged to discuss the benefits and drawbacks of each solution.					
Key Vocabulary	Sequence, Term, Constant, Linear sequence, Geometric sequence, Fibonacci sequence, decimal, Integer, rounding, approximate, powers, Significant figures	Expressions, Substitute, Evaluate, Equal, Equation, Linear equation, Like terms, Unlike terms, Equivalent Coefficient, Variable, Axis, Axes, x-axis, y axis, Origin, Quadrant, Coordinates, Reflection, Translate, Rotation, Transformation, Object, Image, Congruent, Congruence, Clockwise, Anti-clockwise	Multiple, Factor, Factor pair, Highest common factor, Lowest common, multiple, Divisible, Divisor, Fraction, Numerator, denominator, Improper fraction, proper fraction, Mixed number, Proportion, simplify Equivalent, Percent,	Simplify, Expand, Variable, Solve, Equal Equation, substitute, Unknown	Angle, Acute angle, Obtuse angle, Reflex angle, Right angle, Protractor, Degrees, Vertically opposite, Construct, Quadrilateral, Square, Rectangle, Parallelogram, Trapezium, Kite, Rhombus, Delta, Arrowhead, Triangle, Scalene, Isosceles, Equilateral, Parallel, Polygon	Perimeter, Area, Volume, Capacity, Square Rectangle, Parallelogram, Triangle, Composite, Polygon, Length, Breadth, Depth, Height, Width, Data, Scale, Axis, Axes, Graph, Frequency, Line Graph, Pie Chart, Average, Mean, Median, Data, Statistics, Cube, Cuboid, Prism, Net, Edge, Face, Vertex, Vertices, Volume
ASPIRE Habits	Take Risks	Think Logically	Review	Persevere	Think Creatively	Organise
Reading Opportunities	Can you solve my problems Alex Bellos		Entertaining Mathematical Puzzles -Martin Gardner Curious and Interesting Puzzles -David Wells		Professor Stewarts Cabinet of Mathematical Curiosities Ian Stewart	