(Maths) Year 7 Long Term Plan

Rationale (with end points):

In Year 7, our aim is to build securely on the mathematical knowledge and understanding developed at Key Stage 2 across the five main disciplines: number, algebra, ratio and proportion, geometry and measures, and probability and statistics

The curriculum is knowledge-rich and carefully sequenced to strengthen fluency, deepen conceptual understanding, and develop problem-solving and reasoning skills. Particular emphasis is placed on algebra as a fresh starting point, ensuring all pupils — regardless of prior exposure — develop confidence in symbolic representation and generalisation.

By the end of Year 7, pupils will have developed the foundational knowledge, procedural fluency, and reasoning skills necessary to access the Key Stage 3 curriculum with confidence and independence.

Term	Topic	Knowledge	Skills	*Reading /wider reading*
Autumn term 1	• Algebraic Thinking	• Sequences • Algebraic notation & substitution • Expressions and equations	• Exploring sequences and understanding algebraic notation • Forming and solving one step linear equations	The Triumph of Numbers by IB Cohen
Autumn 2	• Place Value and Proportion	• Place value and ordering integers and decimals • Fraction, decimal and percentage equivalence	• Consolidate understanding of place value • Moving freely between different numerical representations • Extending understanding of the number system	Numbers Don't Lie: 71 Things You Need to Know About the World by Vaclav Sm
Spring 1	• Applications of Number	• Represent data in various ways • Solving problems with addition and subtraction • Solving problems with multiplication and division	• Use of values to represent data • Interpreting and solving problems • Forming and solving two-step equations	Perimeter, Area, and Volume: A Monster Book of Dimensions

		• Fractions and percentages of amounts	• Working out fractions & percentages and links between them	
Spring 2	• Directed Number • Fractional Thinking • Perimeter & area	• Operations and equations with directed number • Addition and subtraction of fractions • Area and perimeter of 2D shapes	• Selecting and using appropriate calculation strategies to solve increasingly complex problems • Exploring & calculating problems of fractions greater than one • Understand and explore ways to calculate the area & perimeter of 2D shapes	Think of a number by Johnny Ball
Summer 1	• Speed, distance & time • Numbers	• Speed, distance and time • Use of number applications	• Developing geometric reasoning on how to calculate and application of speed distance, time. • Understanding of indices, prime factors, HCF, LCM and Venn diagrams	Understanding Charts and Graphs by Christine Taylor Butler
Summer 2	• Lines and angles	• Constructing, measuring and using geometric notation	• Reasoning deductively using geometrical constructions • Developing geometric reasoning • Applying angle facts in polygons	Sir Cumference and the Great Knight of Angel and by Cindy Neuschwander