Y7 MATHS

MATHS AT YARDLEYS
INTENT: At Yardleys, we want our pupils to see Mathematics as a universal language that allows us conceptualise and communicate ideas clearly across the curriculum and beyond. Throughout our curriculum, we develop mathematicians that are empowered with the knowledge, attitude and strategies to reason, generalise and simplify complex problems into their composite parts. Our pupils are fluent in the key mathematical processes so that they may become flexible and creative problem solvers that are resilient when faced with challenges.
Y7 MATHS
Year 7 focusses almost exclusively on non-calculator work, ensuring solid foundations in numeracy, consolidating skills learned in KS2 and beginning the KS3 Maths journey introducing topics such as algebra and ratio.

YEAR 7

SUBSTANTIVE KNOWLEDGE	• Place Value, • Comparing and Ordering • Addition and Subtraction of Integers and Decimals • Estimating Rounding • Multiplying and Dividing with Powers of 10 • Multiplication and Area • Division and Applications	• Factors, Multiples and Primes • Order of Operations • Algebra Conventions and Collecting • Algebra Substitution and Solving • Representing Fractions and Ratios • Operations with Fractions	• Percentages • Angles • Perimeter with decimals and algebra Symmetry and Tessellation • Time • Statistics – Interpreting charts •
DISCIPLINARY KNOWLEDGE	• **Develop fluency -** select and use appropriate calculation strategies • **Reason mathematically –** making connections between number relationships • **Solve problems -** use of formal mathematical knowledge	• **Develop fluency -** Use of algebra, move freely between different numerical, algebraic, and diagrammatic representations • **Reason mathematically –** ratio and proportion in working with measures and geometry, and in formulating proportional relations algebraically, express relations between variables algebraically • **Solve problems -** model situations mathematically, express the results using a range of formal mathematical representations	• **Develop fluency -** select and use appropriate calculation strategies, analysis of 2-D shapes and statistics. • **Reason mathematically –** using geometrical constructions • **Solve problems -** use of formal mathematical knowledge