LOCKERS PARK SCHOOL

YEAR 7 & 8

KEY OBJECTIVES

This document provides information for parents on the key objectives taught in each Year group for Maths. All objectives will be worked on throughout the year and will be the focus of direct teaching. If you wish to provide further support at home, then these objectives should be your focus. If you have any queries regarding the content of this document or want support in knowing how best to help your child, then do please contact your child's teacher.

Number	Place value – whole numbers and decimals
	Add, subtract, multiply and divide integers including negatives
	Multiples, factors and primes, powers and roots
	Mixed operations and Inverse operations
	Ratio
	Use of a calculator
	Rounding and estimation
Fractions, decimals and Percentages	Recognise, understand and be able to interpret fractions and decimals
	Add, subtract, multiply and divide fractions and decimals
	Fraction, decimal percentage equivalence and conversions
	Ordering integers, decimals, fractions and percentages including negatives
	Percentage calculations, both calculator and non-calculator methods
	Solve problems in context using the above skills

Algebra	Simplify algebraic expressions
	Substitution, including negatives and simple fractions, into expressions and given formulae
	Form algebraic expressions
	Solve linear equations, up to and including a single denominator, fractional and negative solutions, brackets, variable on both sides
	Draw straight line graphs, with or without a table of values
	Sequences – these may be arithmetic, geometric, square, triangular, Fibonacci numbers etc
Measurement	Use, read, write and convert between standard units, including measurements of length, mass, volume, time, money and temperature, including units of area and volume
	Calculate the area of rectangle, triangle, parallelogram, trapezium and composite shapes
	Perimeter of common shapes and composite shapes
	Area and circumference of circles
	Solids, nets, volume, isometric drawing
	Speed, distance and time calculations, including use of timetables
	Real world graphs, including conversions graphs, scatter graphs and travel graphs

Geometry	Understand the terminology and notation of lines, angles and rectilinear shapes
	Measure and draw lines and angles
	Recognise and draw line and rotational symmetry
	Identify and classify geometric shapes based on their properties and find unknown angles in any triangles, quadrilaterals, and regular polygons
	Calculate missing angles using standard angle rules of lines, triangles and parallel lines
	Calculate missing angles in polygons, including interior, exterior and related angles
	Use positions on the full coordinate grid (all four quadrants) and use for all four transformations
Probability & Statistics	Understand probability ranges from 0 to 1 and express probability as a fraction
	Listing all possible outcomes and understanding equally likely outcomes
	Interpret and construct frequency tables, bar charts and pie charts, and use these to solve problems
	calculate and interpret the mean, median, mode and range of a set of data
	Understand the usefulness of types of average