Armfield Academy – Mathematics Department

Year 7 Support Curriculum Overview

This maths scheme of work is structured to build securely on prior learning, with concepts sequenced for progression and depth. Retrieval practice is embedded to strengthen fluency and long-term retention. Teaching is responsive, with assessment informing adaptation to meet learners' needs. All pupils are challenged through high expectations, with scaffolds to ensure inclusivity and access for all. The scheme aims to develop problem-solving, reasoning, and resilience alongside core mathematical skills. In year 7 we have the 'Core' and the 'Support' curriculum, these are intertwined and teachers have flexibility and fluidity to push pupils in their charge while embedding fundamental knowledge needed for the rest of KS3.

****Note: The Core scheme is additional content for extension****

Term 1	
Week	Curriculum Overview
1 2	**Sequences** - Sequences of diagrams - Continue number sequences - Term-to-term rules - Sequences from a written rule - Linear and non-linear sequences
3 4	**Algebraic Notation** - 1-step function machines (number) - 1-step function machines (algebra) - Find a function (one step) - Substitution (one step) - 2-step function machines (number) - 2-step function machines (algebra) - Substitution (two step)
5 6	**Expressions and Equations** - Like and unlike terms - Collect like terms - Solve 1-step linear equations (+/-) - Solve 1-step linear equations (x/÷) - Solve any 1-step linear equation
7	**Place Value and Ordering** - Read and write integers to 10 000 - Understand the place value of a digit in an integer to 10 000 - Compare integers to 10 000 - Order integers to 10 000 - Work out intervals on a number line - Position integers on a number line - Place value for decimals - Compare and order decimals
8 9	**Four Operations** - Use number bonds - Add integers - Subtract integers - Solve problems with addition and subtraction - Double and halve - Multiply integers

	- Divide integers - Order of operations
10	**Averages and Range** - Mode - Mean - Median - Range
11	**Rounding and Estimation** - Round numbers to the nearest 10 - Round numbers to the nearest 100 - Round numbers to the nearest 10, 100 and 1000
12 13	**Graphing Data** **ASSESSMENT WEEK** - Represent data in pictograms - Interpret pictograms - Represent data in bar charts - Interpret bar charts - Represent data in dual bar charts - Interpret dual bar charts - Coordinates in the first quadrant - Read and interpret tables and scatter graphs - Scatter graphs - Correlation - Lines of best fit
14	**Review and Reteach** - Here we allocate a week to reviewing and reteaching in order to reinforce key concepts, address gaps in understanding, and ensure a strong foundation before advancing in the curriculum.
Term 2	
Week	Curriculum Overview
1 2	**Fractions, Decimals and Percentages** - Explore equal parts - Fractions on a number line - Understand percentages - Explore tenths - Explore a half - Explore quarters - Explore hundredths - Explore fifths - Equivalent fractions, decimals and percentages -
3 4	**Directed Number** - Negative numbers and number lines - Compare and order directed numbers - Calculations that cross zero - Negative numbers and zero pairs - Add directed numbers - Subtract directed numbers

	- Add and subtract directed numbers
5 6	**Fractions and Percentages of Amounts** - Unit fraction of an amount - Use a unit fraction to find the whole - Percentage of an amount (10%, 25% and 50%) - Percentage of an amount (calculator)
7 8	**Perimeter and Area** - Perimeter on a grid - Perimeter of a polygon - Use perimeter to work out side lengths - Area on a grid - Area of a rectangle - Area of a parallelogram - Area of a triangle - Convert metric units of length
9 10	**Speed, Distance and Time** **ASSESSMENT WEEK** - Convert between hours and minutes - Understand speed - Speed, distance and time (non-calculator) - Speed, distance and time (calculator) - Interpret distance-time graphs
11	**Review and Reteach** - Here we allocate a week to reviewing and reteaching in order to reinforce key concepts, address gaps in understanding, and ensure a strong foundation before advancing in the curriculum.
Term 3	
Week	Curriculum Overview
1 2	**Four Operations of Decimal Numbers** - Add decimals - Subtract decimals - Solve problems with decimal addition and subtraction - Multiply integers and decimals by 10 - Multiply integers and decimals by 10, 100 and 1000 - Divide integers and decimals by 10 - Divide integers and decimals by 10, 100 and 1000
3 4	**Properties of Number** - Multiples - Factors - Prime numbers - Square numbers - Triangular numbers - Cube numbers - Counterexamples

5 6 7	**Add and Subtract Fractions** - Add and subtract fractions with the same denominator - Make a whole - Subtract fractions from a whole - Add and subtract fractions crossing 1 - Convert improper fractions to mixed numbers - Convert mixed numbers to improper fractions - Equivalent fractions - Simplify a fraction - Add and subtract fractions within 1 - Add and subtract fractions beyond 1
8 9 10	**Angles in Polygons** - Draw and measure line segments - Estimate distances - Classify angles - Estimate the size of an angle - Protractors - Measure angles - Draw angles - Angles around a point - Angles on a straight line - Angles in a triangle - Angles in a quadrilateral - Solve problems with angles
11 12	**Week 11= Revision and preparation week** **Week 12 ASSESSMENT WEEK** - This week is preparation time that fits around end of year summative assessments.
13 14	**Review and Reteach** - Here we allocate a week to reviewing and reteaching in order to reinforce key concepts, address gaps in understanding, and ensure a strong foundation before advancing in the curriculum.