

## **Armfield Academy – Mathematics Department**



## Year 7 Curriculum Overview

\*\*Note: Objectives in blue are additional higher content for extension\*\*

	Half Term 1
Date	Curriculum Overview
WC 02/09	Sequences - Describe and continue sequences in diagram and number forms, both linear and non-linear
WC 09/09	Understanding and using algebraic notation
WC 16/09	- Using single function machines and series or two function machines with numbers, bar models and letters
WC 23/09	<ul> <li>Forming and substituting into expressions, including generating sequences.</li> </ul>
WC 30/09	- Representing functions graphically
WC 07/10	Equality and equivalence
WC 14/10	- Understanding equality and fact families
	- Forming and solving one-step equations
	- Understanding equivalence
	- Collecting like terms  Half Term 2
	Curriculum Overview
Date	Carriculant Overview
WC 04/11	Consolidation, assessment, feedback (DIRT) and pupil voice.
WC 11/11	Place value and ordering
WC 18/11	- Integer place value up to one billion
WC 25/11	<ul> <li>Decimal place value to hundredths</li> <li>Working out and using number lines</li> </ul>
	- Comparing and ordering numbers
	- The range and the median
	- Rounding to positive powers of ten and to one significant figure
	- Exploring and using standard form
WC 02/11	Fraction, decimal and percentage equivalence
WC 09/11	- Representing tenths and hundredths on diagrams and number lines
WC 16/11	<ul> <li>Interchanging between fractions, decimals and percentages for multiples of tenths and quarters</li> <li>Interpreting pies charts</li> </ul>
	<ul> <li>Interpreting pies charts</li> <li>Equivalent fractions</li> </ul>
	- Converting between any fraction, decimal and percentage
	- Exploring fractions above one
	Half Term 3
Date	Curriculum Overview
WC 06/01	Problem solving with addition and subtraction
WC 13/01	- Use formal methods of addition with integers and decimals
	- Solve problems in the context of perimeter, money and frequency trees and tables
	- Addition in standard form
	- Improper fractions
WC 20/01	Problem solving with multiplication and division
WC 27/01	<ul> <li>Multiplying by 10, 100 and 1000; unit conversions</li> <li>Formal methods of multiplication and division</li> </ul>
WC 03/02 WC 10/02	- HCF and LCM (Highest Common Factor and Lowest Common Multiple)
WC 10/02	- Areas of triangles, rectangles and parallelograms
	- Finding the mean
	- Finding fractions and percentages of amounts
	- Solving 2-step equations (with and without a calculator)
	- Introduction to order of operations
	- Area of a trapezium - Algebraic area
	Half Term 4
Date	Curriculum Overview
WC 24/02	Consolidation, assessment, feedback (DIRT) and pupil voice.
WC 02/03	Four operations with directed numbers (negative numbers)
WC 09/03	- Ordering directed numbers; with and without context
	- Add, subtract, multiply and divide with directed numbers
	- Choosing which method to use
	- Order of operations with negative numbers
	- Negative square roots

WC 16/03	Adding and subtracting fractions	
WC 23/03	- Adding and subtracting fractions with a common denominator, including with answer above one	
WC 30/03	- Revisit equivalent fractions	
	- Adding and subtracting fractions with simple different denominators e.g. quarters/eighths, thirds/sixths	
	- Add and subtract fractions with any denominators	
	- Add and subtract simple algebraic fractions	
Half Term 5		
Date	Curriculum Overview	
WC 20/04	Constructing, measuring and using geometric notation	
WC 27/04	- Drawing and measuring lines and angles using a ruler and protractor	
	- Understanding and using notation for lines and angles	
	- Understand parallel and perpendicular	
	- Recognise types of triangle, quadrilateral and other polygons	
	- Drawing triangles given SSS, SAS, ASA	
	- Drawing and interpreting pie charts	
WC 05/05	Geometric Reasoning	
WC 11/05	- Calculating using angles at a point, angles on a straight line and vertically opposite angles	
WC 18/05	- Calculating missing angles in triangles and quadrilaterals	
	- Parallel lines rules	
	- Angles in a polygon	
	- Proof of angles rules	
Date	Half Term 6  Curriculum Overview	
WC 01/06	Consolidation, assessment, feedback (DIRT) and pupil voice.	
WC 01/00 WC 08/06	Number sense	
WC 15/06	- Mental arithmetic strategies	
WC 15/00	- Using known facts to derive other facts, including algebraic expressions	
WC 22/06	Sets and Probability	
WC 29/06	- Understanding and using set notation	
	- Venn diagrams	
	- Probability of a single event	
	- Venn diagrams for HCF and LCM	
WC 06/07	Types of number	
WC 13/07	- Types of number; triangle, prime	
,	- Prime factorisation	
	- Powers and roots	
	- Using counterexamples	
	- Negative square roots	