

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 29/08 WC 05/09	Sequences - Describe and continue sequences in diagram and number forms, both linear and non-linear
WC 12/09 WC 19/09 WC 26/09	 Understanding and using algebraic notation Using single function machines and series or two function machines with numbers, bar models and letters Forming and substituting into expressions, including generating sequences. Representing functions graphically
WC 03/10 WC 10/10	Equality and equivalence - Understanding equality and fact families - Forming and solving one-step equations
Date	Half Term 2 Curriculum Overview
WC 31/10	Equality and equivalence - Understanding equality and fact families - Forming and solving one-step equations
WC 07/11 WC 14/11	Place value and ordering - Integer place value up to one billion - Decimal place value to hundredths - Working out and using number lines - Comparing and ordering numbers
WC 21/11	 The range and the median Rounding to positive powers of ten and to one significant figure Exploring and using standard form
WC 28/11	 Fraction, decimal and percentage equivalence Representing tenths and hundredths on diagrams and number lines Interchanging between fractions, decimals and percentages for multiples of tenths and quarters
WC 05/12	Recap and assessment week
WC 14/12	Fraction, decimal and percentage equivalence - Interpreting pies charts - Equivalent fractions
	Half Term 3
Date	Curriculum Overview
WC 02/01	 Fraction, decimal and percentage equivalence Converting between any fraction, decimal and percentage Exploring fractions above one
WC 09/01 WC 16/01	Problem solving with addition and subtraction - 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 23/01 WC 30/01 WC 06/02	Problem solving with multiplication and division - Multiplying by 10, 100 and 1000; unit conversions - Formal methods of multiplication and division - HCF and LCM (Highest Common Factor and Lowest Common Multiple) - 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 20/02	Fractions and percentages of amounts Find a fraction of an amount	
	 Use a given fraction to find the whole or other fractions 	
	 Find a percentage of an amount with and without a calculator 	
	 Solve problems with fractions greater than one and percentages over 100% 	
WC 27/02	Four operations with directed numbers (negative numbers)	
WC 06/03	 Ordering directed numbers; with and without context 	
WC 13/03	 Add, subtract, multiply and divide with directed numbers 	
	- Choosing which method to use	
	- Order of operations with negative numbers	
	Negative square roots	
WC 20/03	Recap and assessment week	
WC 27/03	Adding and subtracting fractions	
	 Adding and subtracting fractions with a common denominator, including with answer above one 	
	- 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 17/04	Adding and subtracting fractions continued	
WC 24/04		
WC 01/05	Constructing, measuring and using geometric notation	
WC 08/05	 Drawing and measuring lines and angles using a ruler and protractor 	
WC 15/05	 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 22/05	Geometric Reasoning	
- ,	 Calculating using angles at a point, angles on a straight line and vertically opposite angles 	
	- Calculating missing angles in triangles and quadrilaterals	
	- Parallel lines rules	
	- Angles in a polygon	
	- Proof of angles rules	
	Half Term 6	
Date		
WC 05/06	Geometric Reasoning continued	
WC 12/06		
WC 19/06	Number sense	
WC 26/06	- Mental arithmetic strategies	
	 Using known facts to derive other facts, including algebraic expressions 	
WC 03/07	End of year examinations	
WC 03/07 WC 10/07	Sets and probability	
WC 10/07 WC 17/07	- Identify and represent sets	
	- Interpret and create Venn diagrams	
	- Understand and use the union and intersection of sets	
	- Generate sample spaces for single events	
	- Understand and use the probability scale	
	- Know and use the fact that probabilities of all possible outcomes sum to one	
	Understand the complement of a set	