



Ark Franklin Primary Academy Mathematics Curriculum



Mathematics Overview

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Numbers to 10 Addition and subtraction within 10	Shapes and patterns Numbers to 20 Addition and subtraction within 20	Time Calculation strategies within 20 Numbers to 50	Adding and subtracting within 50 Fractions Measures: Length and weight	Numbers from 50 to 100 and beyond Adding and subtracting within 100 Money	Multiplication and division Measures: Capacity and volume
Year 2	Number within 100 Add and subtract 2-digit numbers Addition and subtraction word problems	Measures: Length Graphs Multiplication and division	Time Exploring calculation strategies Money	Face, shapes and patterns; lines and turns Fractions	Number within 1000 Add and subtract 2- and 3-digit numbers Measures: Capacity and volume	Measure: Mass Multiplication and division 3x 4x
Year 3	Number sense and reasoning within 100 Place value Graphs	Addition and subtraction with up to three digits Length and perimeter	Multiplication and division word problems Using 10s and 100s to multiply and divide large numbers	Time: Analogue, digital and measuring time Fractions	Angles and shapes Length, weight and volume	6 and 8 times tables Exploring calculation strategies and place value
Year 4	Reasoning with four-digit numbers Addition and subtraction	Multiplication and division Discrete and continuous data	Securing multiplication facts Fractions Time	Decimals Area and perimeter	Solving measure and money problems Shape and symmetry	Position and direction Reasoning with patterns and sequences 3D Shape
Year 5	Number and place value Four operations Fractions	Percentages and decimals Division Measurement Area and perimeter	Shape Time Statistics	Measurement Fraction application Decimals and Percentages	Application and reasoning	
Year 6	Arithmetic: Four operations, fractions and percentages Number and Place value Measurement	Measurement Fractions Statistics	Properties of Shape Algebra Ratio and Proportion	Fractions Measurement SATs Revision	SATs Revision	Multicultural multiplication Surveys and investigations

Arithmetic Overview

	Addition	Subtraction	Multiplication	Division	Fractions	Percentages
Year 1	<ul style="list-style-type: none"> a) Count forwards across 100 from any given number b) Add one digit and two digit numbers to 20 	<ul style="list-style-type: none"> a) Count backwards across 100 from any given number b) Subtract one digit and two digit numbers to 20 			<ul style="list-style-type: none"> a) Find half of a quantity b) Find quarter of a quantity 	
Year 2	<ul style="list-style-type: none"> a) Count forwards in steps of 2,3,5 from 0 b) Count forwards in tens from any number c) Add a two-digit and one digit number mentally (up to 100) d) Add a two-digit and tens mentally (up to 100) e) Add two two-digit numbers mentally (up to 100) f) Add three one-digit numbers mentally (up to 100) 	<ul style="list-style-type: none"> a) Count backwards in tens from any number b) Subtract a two-digit and one-digit number mentally (up to 100) c) Subtract a two-digit and tens mentally (up to 100) d) Subtract two two-digit numbers mentally (up to 100) e) Subtract three one-digit numbers mentally (up to 100) 	<ul style="list-style-type: none"> a) Use multiplication facts for the 2, 5 and 10 multiplication tables 	<ul style="list-style-type: none"> a) Use division facts for the 2, 5 and 10 multiplication tables 	<ul style="list-style-type: none"> a) Find one third of a quantity b) Find one quarter of a quantity c) Find two quarters of a quantity d) Find three quarters of a quantity 	
Year 3	<ul style="list-style-type: none"> a) Add 10 or 100 to a number (up to 999) b) Add numbers up to 3 digits using formal method of column addition 	<ul style="list-style-type: none"> a) Subtract 10 or 100 from a number (up to 999) b) Subtract numbers up to 3 digits using formal method of column subtraction 	<ul style="list-style-type: none"> a) Multiply a two digit by a one digit using mental methods and progressing to formal written methods (2, 3, 4, 5 and 8) b) Multiply a whole number by 10 	<ul style="list-style-type: none"> a) Use known multiplication facts to create associated division facts b) Divide one or two digit numbers by 10 	<ul style="list-style-type: none"> a) Add and subtract fractions with the same denominator within one whole b) Find fractions of quantities (up to 100) where the denominator is 2, 3, 4, 5, 8 or 10. 	
Year 4	<ul style="list-style-type: none"> a) Add 1,000 to a number (up to 9,999) b) Add numbers up to 4 digits using formal method of column addition c) Add with decimals (up to tenths and hundredths) 	<ul style="list-style-type: none"> a) Subtract 1,000 from a number (up to 9,999) b) Subtract numbers up to 4 digits using formal method of column subtraction c) Subtract with decimals (up to tenths and hundredths) 	<ul style="list-style-type: none"> a) Multiply 2 and 3 digit numbers by a 1 digit number using a formal written method b) Multiply a whole number by 100 	<ul style="list-style-type: none"> a) Use known multiplication facts to create associated division facts b) Divide one or two digit numbers by 100 	<ul style="list-style-type: none"> a) Add and Subtract fractions where the answer may be an improper fraction b) Find fractions of quantities using known multiplication facts 	
Year 5	<ul style="list-style-type: none"> a) Add 10,000 and 100,000 to a number (up to 999,999) b) Add numbers with more than 4 digits using formal method of column addition c) Add with decimals (up to thousandths) d) Add decimals (where two numbers have a different number of decimal places eg $14.7 + 8.65$) 	<ul style="list-style-type: none"> a) Subtract 10,000 and 100,000 from a number (to 999,999) b) Subtract numbers with more than 4 digits using formal method of column subtraction c) Subtract with decimals (up to thousandths) d) Subtract decimals (where two numbers have a different number of decimal places eg $14.7 - 8.65$) 	<ul style="list-style-type: none"> a) Multiply a 3 digit number by a 2 digit number using formal method of long multiplication b) Multiply whole numbers by 10, 100 and 1,000 (where the answer is no greater than 999,999) c) Multiply decimal numbers by 10, 100 and 1,000 where the quotient may be a decimal d) Recognise and use square and cube numbers 	<ul style="list-style-type: none"> a) Divide numbers up to 4 digits by a 1 digit number using the formal written method of long division (recording with a remainder where required) b) Divide whole numbers by 10, 100 and 1,000 (where the quotient contains a decimal and the dividend may contain a decimal) 	<ul style="list-style-type: none"> a) Add fractions with the same denominators and convert the answer from improper fractions to mixed numbers b) Add and subtract fractions where one denominator is a multiple of the other c) Multiply proper fractions and mixed numbers by whole numbers d) Find fractions of quantities using formal calculation strategies 	<ul style="list-style-type: none"> a) Find 10% of a number b) Find a multiple of 10% of a number c) Find 5% of a number
Year 6	<ul style="list-style-type: none"> a) Add 1,000,000 to a number (up to 999,9999) b) Add and subtract using negative numbers through zero c) Use BIDMAS to identify the correct order of operations 	<ul style="list-style-type: none"> a) Subtract 1,000,000 from a number (up to 9,999,999) 	<ul style="list-style-type: none"> a) Multiply a 4 digit number by a 2 digit number using the formal method of multiplication b) Multiply one digit numbers with up to two decimal places by whole numbers 	<ul style="list-style-type: none"> a) Divide numbers up to 4 digits by a 2 digit number using the formal written method of long division (where the dividend may include a fraction) b) Divide numbers up to 4 digits by a 1 digit number using the formal written method of short division (where the dividend may include a fraction) 	<ul style="list-style-type: none"> a) Add and subtract fractions with different denominators b) Add and subtract a mixed number to a fraction where there are different denominators c) Multiply simple pairs of proper fractions writing the answer in its simplest form d) Divide proper fractions by whole numbers e) Divide fractions by whole numbers where the numerator is a multiple of the whole number f) Divide fractions by whole numbers where the numerator is not a multiple of the whole number 	<ul style="list-style-type: none"> a) Find a multiple of 5% of a number b) Find 1% of a number