

Key Principles in Foundation 2

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Count to 5	Count 6,7,8	Count to 10	Count to 20	Addition by counting on	Halving
Order numbers within 10	Order 2 or more lengths	Add 1 within 10	Everyday language of shape	Subtraction by counting back	Doubling
Add 1 within 5	Order familiar events	Subtract 1 within 10	Add 1 within 20		Sharing
Subtract 1 within 5		Add 2 numbers within 10 by counting sets	Subtract 1 within 20		Compare capacity
		Subtract from a small group by 'taking away'			Compare money

Key Principles in Year 1

Autumn	Spring	Summer
Represent and use number bonds and related subtraction facts within 10	Represent and use number bonds and related subtraction facts within 20	Add and subtract one-digit and two-digit numbers to 20, including zero.
Count, read and write numbers to 20 in numerals;	Count in multiples of twos, fives and tens	Count, read and write numbers to 100 in numerals;
Given a number, identify one more and one less to 20	Count, read and write numbers to 50 in numerals;	Given a number, identify one more and one less to 100
Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs	Recognise, find and name a half as one of two equal parts of an object, shape or quantity	Solve one-step problems involving multiplication and division
Recognise and name common 2-D and 3-D shapes, including:	Given a number, identify one more and one less to 50-	
Recognise and know the value of different denominations of coins and notes	Recognise and use language relating to dates, including days of the week, weeks, months and years	

Key Principles in Year 2

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Recognise the value of each digit in a two-digit number</p> <p>Order numbers to 100</p> <p>Represent 2-digit numbers on a number line</p> <p>Add a single digit to a two-digit number (not crossing ten boundary)</p> <p>Subtract a single digit from a two-digit number</p>	<p>Add two multiples of ten</p> <p>Subtract a multiple of ten from another multiple of ten</p> <p>Add a multiple of ten to a two-digit number</p> <p>Subtract a multiple of ten from a two-digit number</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p> <p>Show how multiplication can be represented</p> <p>Show how division can be represented</p>	<p>Recall and use multiplication facts for the 2, 5 and 10 multiplication tables</p> <p>Recall and use division facts for the 2, 5 and 10 multiplication tables</p> <p>Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{2}{4}$, and $\frac{3}{4}$ of a shape or set of objects</p> <p>Find fractions of amounts</p>	<p>Add three single digits</p> <p>Find amounts made up of different coins</p> <p>Find change</p> <p>Tell the time to quarter past and quarter to</p> <p>Compare and order lengths</p>	<p>Add two 2-digit numbers</p> <p>Subtract a two-digit number from a 2-digit number</p> <p>Use factor, factor, product knowledge of 2 5 and 10 multiplication tables</p> <p>Use mathematical vocabulary to describe rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</p>	<p>Add two 2-digit numbers</p> <p>Subtract a two-digit number from a 2-digit number</p> <p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>Add and subtract mass (kg/g) length/height (cm/m) capacity (ml/l)</p>

Key Principles in Year 3

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p> <p>Compare and order numbers up to 1000</p> <p>Add or subtract 10 or 100 to a 3-digit number</p>	<p>Add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> a three-digit number and ones a three-digit number and tens a three-digit number and hundreds <p>Add and subtract mass (kg/g);</p> <p>Recall and use multiplication facts for the 3, 4 and 8 multiplication tables</p> <p>Recall and use division facts for the 3, 4 and 8 multiplication tables</p>	<p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>Identify right angles, recognise that two right angles make a half-turn</p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p>	<p>Estimate and read time with increasing accuracy to the nearest minute</p> <p>Add and subtract numbers with up to three digits mentally</p> <p>Calculate division with remainders</p>	<p>Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]</p> <p>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p>	<p>Measure the perimeter of simple 2-D shapes</p> <p>Calculate 2-digit x 1 digit and $2d \div 1$ digit for multiplication and division facts they know</p> <p>Interpret and present data using bar charts</p>

Key Principles in Year 4

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Read and write, numbers to at least 10 000</p> <p>Order and compare numbers to at least 10 000</p> <p>Round any number to the nearest 10, 100 or 1000</p> <p>Convery between g and kg</p> <p>Add and subtract 1000s or 100s to a 4-digit number</p>	<p>Add and subtract numbers using a written method</p> <p>Know when to use a mental or written method for addition or subtraction of 4-digit numbers</p> <p>Recall multiplication facts to 12 x 12</p> <p>Recall division facts to 12 x 12</p> <p>Recognise and use factor pairs</p> <p>Find the area of rectilinear shapes by counting squares</p>	<p>Recognise and show common equivalent fractions including improper fractions</p> <p>Add and subtract fractions with the same denominator</p> <p>Recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</p>	<p>Add numbers to 1 decimal place</p> <p>Subtract numbers to 1 decimal place</p> <p>Read, write and convert time between analogue and digital 12- and 24-hour clocks</p> <p>Multiply and divide two-digit and three-digit numbers by a one-digit number using formal written layout</p>	<p>Convert between km and m</p> <p>Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$</p> <p>Add numbers to 2 decimal places</p> <p>Subtract numbers to 2 decimal places</p> <p>Compare and calculate different measures, including money in pounds and pence</p>	<p>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <p>Count backwards through zero to include negative numbers</p> <p>Identify acute and obtuse angles</p> <p>Describe positions on a 2-D grid as coordinates in the first quadrant</p>

Key Principles in Year 5

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Read and write, numbers to at least 1 000 000</p> <p>Order and compare numbers to at least 1 000 000</p> <p>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p> <p>Add and subtract numbers mentally with increasingly large numbers eg 5-digit – 4-digit multiple of 10</p> <p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p>	<p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</p> <p>Know and use the vocabulary of prime numbers, prime factors, composite, square and cubed</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</p> <p>Calculate new facts drawing on previous knowledge</p> <p>Calculate area of rectangles</p>	<p>Recognise mixed numbers and improper fractions and convert from one form to the other</p> <p>Compare and order fractions whose denominators are all multiples of the same number</p> <p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number</p>	<p>Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</p> <p>Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context</p> <p>Complete, read and interpret information in tables, including timetables.</p> <p>Identify, describe and represent the position of a shape following a reflection or translation</p>	<p>Draw given angles, and measure them in degrees ($^{\circ}$)</p> <p>Read, write, order and compare numbers with up to three decimal places</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</p> <p>Add and subtract decimals with mixed decimal places</p> <p>Solve problems involving converting between units of time</p>	<p>Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</p> <p>Convert between different units of metric measure</p> <p>Interpret line graphs</p>

