

	Number and Place Value	Number – Addition and Subtraction	Number – Multiplication and Division	Number – Fractions
Yr 1	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ♣ count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens ♣ given a number, identify one more and one less ♣ identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least ♣ read and write numbers from 1 to 20 in numerals and words. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs ♣ represent and use number bonds and related subtraction facts within 20 ♣ add and subtract one-digit and two-digit numbers to 20, including zero ♣ solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ recognise, find and name a half as one of two equal parts of an object, shape or quantity ♣ recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
Yr 2	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward ♣ recognise the place value of each digit in a two-digit number (10s, 1s) ♣ identify, represent and estimate numbers using different representations, including the number line ♣ compare and order numbers from 0 up to 100; use <, > and = signs ♣ read and write numbers to at least 100 in numerals and in words ♣ use place value and number facts to solve problems 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods ♣ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 ♣ add and subtract numbers using concrete objects, pictorial representations, and mentally, 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ♣ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs ♣ show that multiplication of 2 numbers can be done in any 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣ recognise, find, name and write fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity ♣ write simple fractions, for example $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$

		<p>including:</p> <ul style="list-style-type: none"> a two-digit number and 1s a two-digit number and 10s 2 two-digit numbers adding 3 one-digit numbers ♣show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot ♣recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 	<p>order (commutative) and division of 1 number by another cannot</p> <ul style="list-style-type: none"> ♣solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 	
Yr 3	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number ♣recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) ♣compare and order numbers up to 1,000 identify, represent and estimate numbers using different representations ♣read and write numbers up to 1,000 in numerals and in words ♣solve number problems and practical problems involving these ideas 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣add and subtract numbers mentally, including: <ul style="list-style-type: none"> a three-digit number and 1s a three-digit number and 10s a three-digit number and 100s ♣add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction ♣estimate the answer to a calculation and use inverse operations to check answers ♣solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ♣write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods ♣solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣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 ♣recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators ♣recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators ♣recognise and show, using diagrams, equivalent fractions with small denominators ♣add and subtract fractions

			connected to m objects	<p>with the same denominator within one whole [for $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]</p> <ul style="list-style-type: none"> ♣compare and order unit fractions, and fractions with the same denominators ♣solve problems that involve all of the above
Yr 4	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣count in multiples of 6, 7, 9, 25 and 1,000 ♣find 1,000 more or less than a given number ♣count backwards through 0 to include negative numbers ♣recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) ♣order and compare numbers beyond 1,000 ♣identify, represent and estimate numbers using different representations ♣round any number to the nearest 10, 100 or 1,000 ♣solve number and practical problems that involve all of the above and with increasingly large positive numbers ♣read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate ♣estimate and use inverse operations to check answers to a calculation ♣solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣recall multiplication and division facts for multiplication tables up to 12×12 ♣use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers ♣recognise and use factor pairs and commutativity in mental calculations ♣multiply two-digit and three-digit numbers by a one-digit number using formal written layout ♣solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ♣recognise and show, using diagrams, families of common equivalent fractions ♣count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 ♣solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number ♣add and subtract fractions with the same denominator ♣recognise and write decimal equivalents of any number of tenths or hundreds ♣recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ ♣find the effect of dividing a one- or two-digit number by

			problems such as n objects are connected to m objects	10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths ♣round decimals with 1 decimal place to the nearest whole number ♣compare numbers with the same number of decimal places up to 2 decimal places ♣solve simple measure and money problems involving fractions and decimals to 2 decimal places
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