

Multiplication and Division

MULTIPLICATION & DIVISION FACTS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>count in multiples of twos, fives and tens (copied from Number and Place Value)</p> <p>Numberblocks: Fifty-counting in 5s https://www.bbc.co.uk/iplayer/episode/m0007jym/numberblocks-series-4-fifty</p> <p>Numberblocks: One Hundred-counting in tens https://www.bbc.co.uk/iplayer/episode/m0007kw/numberblocks-series-4-one-hundred</p> <p>Numberblocks: Land of the Giants- counting in tens https://www.bbc.co.uk/iplayer/episode/m0007qcv/numberblocks-series-4-land-of-the-giants</p> <p>Numberblocks: I can count to twenty https://www.bbc.co.uk/iplayer/episode/m0006s5g/numberblocks-series-4-i-can-count-to-twenty</p>	<p>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward (copied from Number and Place Value)</p> <p>Numberblocks: Fifty-counting in 5s https://www.bbc.co.uk/iplayer/episode/m0007jym/numberblocks-series-4-fifty</p> <p>Numberblocks: One Hundred-counting in tens https://www.bbc.co.uk/iplayer/episode/m0007kw/numberblocks-series-4-one-hundred</p> <p>Numberblocks: Land of the Giants- counting in tens https://www.bbc.co.uk/iplayer/episode/m0007qcv/numberblocks-series-4-land-of-the-giants</p> <p>Numberblocks: I can count to twenty https://www.bbc.co.uk/iplayer/episode/m0006s5g/numberblocks-series-4-i-can-count-to-twenty</p>	<p>count from 0 in multiples of 4, 8, 50 and 100 (copied from Number and Place Value)</p>	<p>count in multiples of 6, 7, 9, 25 and 1 000 (copied from Number and Place Value)</p>	<p>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 (copied from Number and Place Value)</p>	

<p>Numberblocks: Double Trouble-doubling and halving upto 8 https://www.bbc.co.uk/iplayer/episode/b08q4jka/numberblocks-series-2-double-trouble</p>	<p>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>Numberblocks: Double Trouble-doubling and halving upto 8 https://www.bbc.co.uk/iplayer/episode/b08q4jka/numberblocks-series-2-double-trouble</p> <p>Numberblocks: Odds and Evens https://www.bbc.co.uk/iplayer/episode/b08r2l4d/numberblocks-series-2-odds-and-evens</p> <p>Numberblocks: Ride the Rays-odd and even https://www.bbc.co.uk/iplayer/episode/m0002724/numberblocks-series-3-ride-the-rays</p> <p>Numberblocks: Loop the Loop-understand repeated addition https://www.bbc.co.uk/iplayer/episode/m00064v6/numberblocks-series-4-loop-the-loop</p> <p>Number blocks: Sign of the times https://www.bbc.co.uk/iplayer/episode/m0006w5r/numberblocks-series-4-sign-of-the-times</p> <p>Number blocks: Fun time fair https://www.bbc.co.uk/iplayer/episode/m0006xcc/numberblocks-series-4-fun-times-fair</p> <p>Numberblocks: Terrible Twosday-division by 2 https://www.bbc.co.uk/iplayer/episode/m0006xds/numberblocks-series-4-terrible-tuosday</p> <p>Numberblocks: Sixty's High Score-ten times table https://www.bbc.co.uk/iplayer/episode/m0007n47/numberblocks-series-4-sixtys-high-score</p>	<p>recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p> <p>Number blocks: Sign of the times https://www.bbc.co.uk/iplayer/episode/m0006w5r/numberblocks-series-4-sign-of-the-times</p> <p>Number blocks: Fun time fair https://www.bbc.co.uk/iplayer/episode/m0006xcc/numberblocks-series-4-fun-times-fair</p> <p>Number blocks: The Lair of the Share https://www.bbc.co.uk/iplayer/episode/m0006xcw/numberblocks-series-4-the-lair-of-shares</p> <p>Number blocks: Divide and Dive https://www.bbc.co.uk/iplayer/episode/m0006xfs/numberblocks-series-4-divide-and-drive</p>	<p>recall multiplication and division facts for multiplication tables up to 12×12</p>		
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	<p>Numberblocks: Land of the Giants- 10 times table</p> <p>https://www.bbc.co.uk/iplayer/episode/m0007qcv/numberblocks-series-4-land-of-the-giants</p>				
MENTAL CALCULATION					
		<p>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 (and including regrouping), using mental and progressing to formal written methods (appears also in Written Methods)</p> <p>Number blocks: The Way of the Rectangle</p> <p>https://www.bbc.co.uk/iplayer/episode/m000271w/numberblocks-series-3-the-way-of-the-rectangle</p>	<p>use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</p>	<p>multiply and divide numbers mentally drawing upon known facts</p>	<p>perform mental calculations, including with mixed operations and large numbers</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>Numberblocks: The Way of the Rectangle-2 x 6 is the same amount as 6 x 2</p> <p>https://www.bbc.co.uk/iplayer/episode/m000271w/numberblocks-series-3-the-way-of-the-rectangle</p>		<p>recognise and use factor pairs and commutativity in mental calculations (appears also in Properties of Numbers)</p>	<p>multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</p>	<p><i>associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)</i> (copied from Fractions)</p>
WRITTEN CALCULATION					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication</p>	<p>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</p>	<p>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</p>	<p>multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long</p>	<p>multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal</p>

	(×), division (÷) and equals (=) signs	written methods (appears also in Mental Methods)		multiplication for two-digit numbers	written method of long multiplication
				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	divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
					<i>use written division methods in cases where the answer has up to two decimal places (copied from Fractions (including decimals))</i>

PROPERTIES OF NUMBERS: MULTIPLES, FACTORS, PRIMES, SQUARE AND CUBE NUMBERS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			recognise and use factor pairs and commutativity in mental calculations (repeated)	identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers establish whether a number up to 100 is prime and recall prime numbers up to 19	identify common factors, common multiples and prime numbers
				recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) Numberblocks: Square Club https://www.bbc.co.uk/iplayer/episode/m00063vg/numberblocks-series-4-square-club	<i>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units such as mm^3 and km^3</i> (copied from Measures)