

Y4	Pupils will:	Stem sentences	Generalisations
Wk1	 consider 'many as 1' and see that a 'unit' can represent more than 1 represent 'many as 1' using a unitised counter recap that a 'unit' can represent 'many as 1' see that 1 unit can be repeated represent 1 or more units using unitised counters and multiplication expressions recap that 1 unit can be repeated represent 1 or more units using unitised counters and multiplication expressions practise representing repeated units using unitised counters and multiplication expressions identify which factor changes when there is a change in the number of units or the size of the unit practise representing repeated units using unitised counters and multiplication expressions practise representing repeated units using unitised counters and multiplication expressions practise identifying which factor changes when there is a change in the number of units or the size of the unit 	 There are ones. There is 1 There is 1 There is time. There are There is times. 	
Wk2	 recap how multiplication can be represented using unitised counters, words and symbols relate 2 equal sets to doubles and describe this in different ways represent doubles with unitised counters represent doubles with expressions and identify that one of the factors will always be 2 recap that doubling can always be represented by 2 unitised counters and a multiplication expression in which one factor is always 2 recall doubles to double 5 and connect these to multiplication facts identify that doubling a whole number always gives an even number and reason why 	 There are There is, times. 5 needs to make; is made of 5 and Double 5 is Double is Double is Double is 	 When a number is doubled, one of the factors will always be 2. Doubling a whole number always gives an even number.



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Wk3	 recap that doubling any whole number always gives an even number, and recall doubles up to double 5 find double 6, 7, 8 and 9 by using the '5 and a bit' structure practise recalling doubles to find the product when 2 is a factor recap the missing part of 6, 7, 8 and 9 if 5 is a part practise finding double 6, 7, 8 and 9 by using the '5 and a bit' structure reason about these doubles practise finding double 6, 7, 8 and 9 by using the '5 and a bit' structure reason about these doubles connect doubles to the related multiplication facts in which 2 is a factor practise recalling products in the 2 times table, focusing on the number of syllables in the products identify that doubles facts can be used when solving problems involving repeated units of 2 practise retrieving factors when the product is given and one of the factors is 2 reason about doubles 11–14 practise recalling products in the 2 times table, focusing on the number of syllables in the products reason about doubles 11–19 practise recalling products in the 2 times table, focusing on the number of syllables in the products reason about the numbers that result from doubling a number, and doubling the resulting number connect doubling and doubling again to multiplying by 4 practise recalling products when one of the factors is 4 reason about the connection between doubling and halving 	 There are There is, times. Double 10 is Double is 20 and is Double is Double is So, 4 times is equal to 	



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Wk4	 recall products in the 5 times table identify that facts in the 5 times table have a product that is a multiple of 10 when one factor is even recap that facts in the 5 times table have a product that is a multiple of 10 when one factor is even identify that facts in the 5 times table have a product that is NOT a multiple of 10 when the factor that is not 5 is odd recap halves of numbers within 20 identify that halving a multiple of 10 can help us to find products when one of the factors is 5 recap that halving a multiple of 10 can help us to find products when one of the factors is 5 practise recalling products when 5 is a factor practise recalling facts for the 2 and 5 times tables 	• times 10 is equal to	 The product of 5 and an EVEN number is a multiple of 10. The product of 5 and an ODD number ends in a 5. When one factor is halved, the product is halved.
Wk5	 identify arrangements of blocks that make square shapes identify what happens when two factors that are the same are multiplied together recap the generalisation that when two factors that are the same are multiplied together, the product is a square number practise saying 'factor, factor, product' when the factors are the same sort numbers according to whether they are square or not square recall square numbers previously explored reason about the square products for 6 × 6 and 9 × 9 practise recalling square products previously learned reason about square products for 7 × 7 and 8 × 8 reason about how 7 × 7 and 8 × 8 can be represented using unitised counters. recap products for square facts to 100 derive the products for 11 × 11 and 12 × 12 begin to practise retrieving facts in which 2 is a factor practise recalling the product when two factors are the same solve multiplication problems using learned facts 	 There are	When two factors that are the same are multiplied together, the product is a square number.



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Wk6	 recall facts from previous sessions use the distributive property to explore why 12 times a number is equal to 10 times the number add 2 times the number focus on the first four facts from the 12 times table, using unitised counters to represent the structure recap the first four facts from the 12 times table revise the fact 5 × 12 practise fact retrieval recap previously learned facts from the 12 times table use the distributive property to think about 6 × 12 use a number line gesture to compare the position of 10 sixes and 12 sixes recap the first six facts from the 12 times table use the distributive property to think about 7 × 12 use a number line gesture to compare the position of 10 sevens and 12 sevens recap the first seven facts from the 12 times table use their understanding of multiplying by 10 to work out 10 × 12 recall the fact 12 × 12 	 10s add 2s is equal to 12s. 12s is equal to 10s add 2s. 10s, 12s, 	When two factors that are the same are multiplied together, the product is a square number.
Wk7	 recap facts from previous sessions use the distributive property to think about the facts 8 × 12 and 9 × 12 recap facts from previous sessions use 10 × 12 to explain the product of 11 × 12 recap facts from previous sessions practise recalling all 12 times table facts up to 12 × 12 make practice cards for the 12 times table facts recall facts from the 12 times table use the distributive property to explore why 11 times a number is equal to 10 times the number add 1 times the number focus on the first nine facts from the 11 times table and explain the pattern between factors and products recap the first nine facts from the 11 times table learn the fact 10 × 11 practise recalling all the facts in the 11 times table up to 11 × 11 	 10s, 12s, 10s add 1s. 11s is equal to 10s add 1 10s, 11s, 	When two factors that are the same are multiplied together, the product is a square number.

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Y4	Pupils will:	Stem sentences	Generalisations
Wk8	 recap facts from previous sessions explore why 9 times a number is equal to 10 times the number subtract 1 times the number recap facts from previous sessions recap why 9 times a number is equal to 10 times the number subtract 1 times the number practise subtracting 1 times a number from 10 times the number identify missing digits in multiples of 9 recap facts from previous sessions explore the facts 3 × 9, 4 × 9 and 5 × 9 compare arrays which change from factor 10 to factor 9 use the sweeping hand gesture to represent the factors and product on an array use the number line gesture to show how 10 of a number is connected to 9 of the same number recap facts from previous sessions recap the connection between 10 times a number and 9 times the number using the number line gesture and the sweeping hand gesture explore the facts 6 × 9, 7 × 9 and 8 × 9 look for patterns between factors and products in the 9 times table recap facts from previous sessions practise facts from the 9 times table 	• 10s subtract 1is equal to 9s. • 9s is equal to 10s subtract 1 • 10s, 9s,	
Wk9	 begin to become familiar with the expressions for the core multiplication facts (CMF) recap that when two factors that are the same are multiplied together, the product is a square number practise recalling 10 × 10, 11 × 11 and 12 × 12 practise recalling multiplication facts in which the two factors are the same apply the commutative property of multiplication to recognise those products that are the same recap that when 1 is a factor, the product is equal to the other factor (when there are two factors) 		 When two factors that are the same are multiplied together, the product is a square number. When the order of the factors is changed, the product remains the same.

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Y4	Pupils will:	Stem sentences	Generalisations
	 recognise that the 36 core facts in the core multiplication facts (CMF) table can be used to solve any multiplication calculation recap facts in which 2 is a factor identify patterns in the core multiplication facts (CMF) table and recognise that, in the CMF, the smaller factor is always written first practise saying the smaller factor first, regardless of the position of the factors. recap that the smaller factor is always written first in the core multiplication facts (CMF) practise saying the smaller factor first, regardless of the position of the factors recap that multiplication is commutative identify those facts that are less well known 		When 1 is a factor, the product is equal to the other factor (if there are only two factors).
Wk10	 recap the products for 10 × 10 connect 10 × 11 to 10 × 10, and to 11 × 11 use these facts to solve problems practise recalling the products for 10 × 10, 10 × 11 and 11 × 11 identify that 10 × 12 and 12 × 10 both have the product 120 use these facts to solve problems practise recalling the products for 10 × 10, 10 × 11 and 11 × 11 practise deriving and recalling 11 × 12 using 10 × 12 practise deriving and recalling 12 × 12 from 11 × 12 OR using partial products recall 12 × 12 and identify the product as a square number reason about missing digits involving previously- learned facts estimate the position of multiples of 12 in the linear number system recall the products for 1 × 1 and 11 × 11 recall the products for 1 × 1 and 11 × 11 	• 10s subtract 1	Where none of the factors are even, the product is odd.
	 recap that 5 × 9 is equal to 10 fives subtract 1 five practise recalling the product for 5 × 9 using the oral pattern and gestures recall the products for 2 × 2 and 12 × 12 write corresponding multiplication and division facts for 5 × 9 practise recalling the product for 5 × 9 using the oral pattern and gestures recall the products for 2 × 12 and 5 × 5 	is equal to 9 s.	 are even, the product is odd. Where at least one of the factors is even, the product is even.

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Y4	Pupils will:	Stem sentences	Generalisations
	 explore why 3 x 4 is equal to double 6 practise recalling the product for 3 × 4 using the oral pattern and gestures recall the products for 2 × 11 and 10 × 11 write corresponding multiplication and division facts for 3 × 4 practise recalling the product for 3 × 4 using the oral pattern and gestures recap the connection between a context, unitised counters and multiplication expressions practise retrieving facts previously learned 	 9s is equal to 10s subtract 1 10s, 9 There are There is,t time/s. 	
Wk12	 recall the products for 5 × 9 and 3 × 4 recap that 3 × 9 is equal to 10 threes subtract 1 three practise retrieving previously-learned facts recall the products for 2 × 5 and 5 × 12 write corresponding multiplication and division facts for 3 × 9 practise recalling the product for 3 × 9 using the oral pattern and gestures recall the products for 2 × 6 and 6 × 12 explore why 7 × 8 equals 56 practise recalling the product for 7 × 8 using the oral pattern and gestures recall the products for 9 × 9 and 8 × 8 write corresponding multiplication and division facts for 7 × 8 practise recalling the product for 7 × 8 using the oral pattern and gestures recap the connection between a context, unitised counters and multiplication expressions practise retrieving facts previously learned 	• 10s, 9 9	 Where none of the factors are even, the product is odd. Where at least one of the factors is even, the product is even.
Wk13		• Double 10 is; Double is; 20 and is, so double is	 Where none of the factors are even, the product is odd. The product of 5 and an ODD number ends in a 5.



Y4	Pupils will:	Stem sentences	Generalisations
	 recall the products for 7 × 7 and 2 × 9 explore why 4 × 8 equals 32 practise recalling the product for 4 × 8 using the oral pattern and gestures recall the products for 5 × 9 and 3 × 4 write corresponding multiplication and division facts for 4 × 8 practise recalling the product for 4 × 8 using the oral pattern and gestures recap the connection between a context, unitised counters and multiplication equations practise retrieving facts previously learned 		Where at least one of the factors is even, the product is even.
Wk14	 recall the products for 3 × 9 and 7 × 8 reason about 3 × 7, relating it to 2 × 7 and 1 × 7 practise recalling the product for 3 × 7 using the oral pattern and gestures recall the products for 4 × 4 and 2 × 8 write corresponding multiplication and division facts for 3 × 7 reason about 3 × 7, relating it to 2 × 7 and 1 × 7, and then to 3 × 5 and 3 × 2 practise recalling the product for 3 × 7 using the oral pattern and gestures recall the products for 7 × 12 and 11 × 12 reason about 6 × 7, relating it to 3 × 7 and 3 × 7, and see that the product of 6 and 7 is double the product of 3 and 7 practise recalling the product for 6 × 7 using the oral pattern and gestures recall the products for 5 × 7 and 4 × 8 write corresponding multiplication and division facts for 6 × 7 reason about 6 × 7, relating it to 5 × 7 and 2 × 7 practise recalling the product for 6 × 7 using the oral pattern and gestures use learned facts to solve contextualised problems practise retrieving facts previously learned 		 Where none of the factors are even, the product is odd. Where at least one of the factors is even, the product is even. When one factor is doubled, the product is doubled.
Wk15	practise retrieving previously learned facts		



Y4	Pupils will:	Stem sentences	Generalisations
Wk16	 recall the products for 2 × 12 and 6 × 7 derive 3 × 8 using 3 × 4 practise recalling the product for 3 × 8 using the oral pattern and gestures recall the products for 6 × 6 and 3 × 12 write corresponding multiplication and division facts for 3 × 8 practise recalling the product for 3 × 8 using the oral pattern and gestures recall the products for 4 × 12 and 8 × 12 derive 4 × 6 using known facts practise recalling the product for 4 × 6 using the oral pattern and gestures recall the products for 9 × 12 and 10 × 12 write corresponding multiplication and division facts for 4 × 6 practise recalling the product for 4 × 6 using the oral pattern and gestures recap the connection between a context, unitised counters and multiplication equations practise retrieving facts previously learned 		Where at least one of the factors is even, the product is even.
Wk17	 recall the products for 5 × 5 and 7 × 8 derive 6 × 8 by adding 8 to the product of 5 and 8 practise recalling the product for 6 × 8 using the oral pattern and gestures recall the products for 3 × 8 and 7 × 12 write corresponding multiplication and division facts for 6 × 8 practise recalling the product for 6 × 8 using the oral pattern and gestures. recall the products for 2 × 6 and 3 × 9 derive 3 × 6 using known facts practise recalling the product for 3 × 6 using the oral pattern and gestures recall the products for 4 × 6 and 10 × 11 write corresponding multiplication and division facts for 3 × 6 practise recalling the product for 3 × 6 using the oral pattern and gestures recap the connection between a context, unitised counters and multiplication expressions practise retrieving facts previously learned 		Where at least one of the factors is even, the product is even.

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Y4	Pupils will:	Stem sentences	Generalisations
Wk18	 recall the products for 4 × 8 and 7 × 7 recap that 6 × 9 is equal to 10 sixes subtract 1 six practise recalling the product for 6 × 9 using the oral pattern and gestures recall the products for 6 × 8 and 11 × 11 write corresponding multiplication and division facts for 6 × 9 practise recalling the product for 6 × 9 using the oral pattern and gestures recall the products for 3 × 6 and 5 × 12 derive 5 × 6 using known facts practise recalling the product for 5 × 6 using the oral pattern and gestures recall the products for 3 × 8 and 4 × 6 write corresponding multiplication and division facts for 5 × 6 practise recalling the product for 5 × 6 using the oral pattern and gestures use previously- learned facts to solve problems practise retrieving facts previously learned 	 10s subtract 1is equal to 9s. 9s is equal to 10s subtract 1 10s 9s, 	 Where at least one of the factors is even, the product is even. The product of 5 and an EVEN number ends in a 0.
Wk19	 recall the products for 6 × 8 and 5 × 6 recap that 7 × 9 is equal to 10 sevens subtract 1 seven practise recalling the product for 7 × 9 using the oral pattern and gestures recall the products for 3 × 6 and 6 × 9 write corresponding multiplication and division facts for 7 × 9 practise recalling the product for 7 × 9 using the oral pattern and gestures recall the products for 6 × 7 and 7 × 12 derive 5 × 8 using known facts practise recalling the product for 5 × 8 using the oral pattern and gestures recall the products for 5 × 9 and 6 × 12 write corresponding multiplication and division facts for 5 × 8 practise recalling the product for 5 × 8 using the oral pattern and gestures use previously learned facts to solve problems practise retrieving facts previously learned 	 10s subtract 1 is equal to 9s. 9s is equal to 10s subtract 1 10s, 9s, 	Where none of the factors are even, the product is odd.

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Y4	Pupils will:	Stem sentences	Generalisations
Wk20	practise retrieving previously learned facts		
Wk21	 recall the products for 7 × 9 and 5 × 8 recap that 8 × 9 is equal to 10 eights subtract 1 eight practise recalling the product for 8 × 9 using the oral pattern and gestures recall the products for 6 × 7 and 3 × 8 write corresponding multiplication and division facts for 8 × 9 practise recalling the product for 8 × 9 using the oral pattern and gestures recall the products for 6 × 9 and 5 × 6 derive 3 × 5 using known facts practise recalling the product for 3 × 5 using the oral pattern and gestures recall the products for 9 × 9 and 7 × 8 write corresponding multiplication and division facts for 3 × 5 practise recalling the product for 3 × 5 using the oral pattern and gestures use previously learned facts to solve problems practise retrieving facts previously learned 	 10s, 9 s, 10s subtract 1 is equal to 9 s. 9s is equal to 10 s subtract 1 	 Where none of the factors are even, the product is odd. Where at least one of the factors is even, the product is even.
Wk22	 recall the products for 8 × 9 and 3 × 5 recap that 4 × 9 is equal to 10 fours subtract 1 four practise recalling the product for 4 × 9 using the oral pattern and gestures recall the products for 7 × 9 and 4 × 8 write corresponding multiplication and division facts for 4 × 9 practise recalling the product for 4 × 9 using the oral pattern and gestures recall the products for 5 × 8 and 3 × 8 interpret 4 × 5 as '4 fives' and see how it is connected to 2 tens practise recalling the product for 4 × 5 using the oral pattern and gestures recall the products for 5 × 7 and 8 × 8 write corresponding multiplication and division facts for 4 × 5 practise recalling the product for 4 × 5 using the oral pattern and gestures use previously learned facts to solve problems practise retrieving facts previously learned 	• 10s, • 9s,	Where at least one of the factors is even, the product is even.



Y4	Pupils will:	Stem sentences	Generalisations
Wk24 Wk25 Wk26	 recall the products for 8 × 9 and 3 × 5 derive the product for 4 × 7 by connecting it to 2 × 7 practise recalling the product for 4 × 7 using the oral pattern and gestures recall the products for 4 × 5 and 4 × 9 write corresponding multiplication and division facts for 4 × 7 practise recalling the product for 4 × 7 using the oral pattern and gestures use previously learned facts to solve problems practise retrieving facts previously learned practise recalling previously learned facts Going for Gold card practice Teacher prompt cards: fact practice with individual pupils Whole-class fact practice Going for Gold fact recap slides Other ideas for fact practice Odd and even products Square number fact practice Factor 9 fact practice Factor 12 fact practice Factor 9 and factor 12 fact practice Core multiplication facts (CMF) grid 		Where at least one of the factors is even, the product is even. Where none of the factors are even, the product is odd. Where at least one of the factors is even, the product is even.
Wk27	 use generalised statements to recap whether products are odd or even find missing factors in multiplication equations find all the factors for a given product recap finding missing digits and factors in multiplication equations complete unitised counter representations by finding missing factors find missing factors and write equations to match a given maths story recap finding missing factors in multiplication equations recap square number facts draw unitised counter representations to match a maths story adapt multiplication stories for a given equation recap square numbers and their matching factors 	 represents the unit size. represents the number of units. 	 Where none of the factors are even, the product is odd. Where at least one of the factors is even, the product is even.



Y4	Pupils will:	Stem sentences	Generalisations
	recap drawing unitised counter representations to match a maths story		
	identify products from times table facts and write matching expressions		
	find the nearest multiple of a given number less than 17		
	• identify products from multiplication table facts and write matching expressions		
	find the nearest multiple of 8 to a given number		
	explore multiples of 8 through a game called 'Bin It!'		
Wk28	recap finding missing digits and factors in multiplication equations		The value of the product in a
	solve and write multiplication maths stories involving measures contexts		multiplication equation
	recap writing a multiplication maths story involving measures contexts		becomes the value of the
	identify products from times table facts and write matching expressions		dividend in the corresponding
	find the nearest multiples, that are less than a given number, to complete equations		division equation.
	recap finding the nearest multiples, that are less than a given number, to complete equations		
	explore how the value of the product in a multiplication equation becomes the value of the dividend in the corresponding division equation		
	find missing factors in multiplication equations		
	find missing quotients in corresponding division equations		
	recap finding missing factors and quotients in corresponding division equations		
	identify products from times table facts and write matching expressions		
	find the nearest multiples, that are less than a given number, to complete multiplication and division equations		
	recap finding missing factors and quotients in corresponding division equations		
	identify products from times table facts and write matching expressions		
	find the nearest multiples, that are less than a given number, to complete multiplication and division equations		
	explore multiples of 7 through a game called 'Bin It!'		
Wk29	recap finding missing factors in an equation		The value of the product in a
	use corresponding multiplication equations to solve division equations		multiplication equation
	• recap using corresponding multiplication equations to solve division equations.		becomes the value of the
	• write corresponding multiplication and division equations for a given fact that is beyond the range of times table facts		



Y4	Pupils will:	Stem sentences	Generalisations
	 recap writing corresponding multiplication and division equations for a given fact that is beyond the range of times table facts solve maths stories involving division explain what each number represents in equations relating to maths stories involving division recap solving maths stories involving division identify products from times table facts and write matching expressions find the nearest multiples that are less than a given number and complete related multiplication and division equations identify products from times table facts and write matching expressions find the nearest multiples that are less than a given number and complete related multiplication and division equations use clues to identify matching numbers explore multiples of 6 through a game called 'Bin It!' 		dividend in the corresponding division equation.
Wk30			The value of the product of a multiplication equation becomes the value of the dividend of a corresponding division equation.