



West Kirby Primary
School
Calculation Policy
2022



This progression document is intended to support the teaching of written calculation strategies and the teaching of times tables.

The document states the required mathematical vocabulary to be taught in each year group.



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Addition

Skill	Year	Representation and models
To count on	EYFS	Number shapes Five frames Ten frames (within 10) Bead strings (10) Numicon Linking cubes Part-whole models Number tracks
Add two 1-digit numbers to 10	1	Part- whole models Bar models Number shapes Ten frames (within 10) Bead strings (10) Number tracks
Add 1 and 2-digit numbers to 20	1	Part- whole models Bar models Number shapes Ten frames (within 20) Bead strings (20) Number tracks Number lines (labelled) Straws
Add three 1-digit numbers	2	Part- whole models Bar models Number shapes Ten frames (within 20)
Add 1 and 2-digit numbers to 100	2	Part- whole models Bar models Number lines (labelled) Number lines (blank) Straws Hundred square
Add two 2-digit numbers	2	Part-whole model Bar model Number lines (blank)



		Straws Base 10 Place value counters Column addition
Add up to 3-digits	3	Part-whole model Bar model Base 10 Place value counters Column addition
Add with up to 4-digits	4	Part-whole model Bar model Base 10 Place value counters Column addition
Add with more than 4 digits	5	Part-whole model Bar model Place value counters Column addition
Add up to 3 decimal places	5	Part-whole model Bar model Place value counters Column addition



Skill: Add 1-digit numbers within 10

EYFS and Year 1

$4 + 3 = 7$

When adding numbers to 10, children can explore both aggregation and augmentation.

The part-whole model, discrete and continuous bar model, number shapes and ten frame support aggregation.

The combination bar model, ten frame, bead string and number track all support augmentation.

Skill: Add 1 and 2-digit numbers to 20

Year: 1/2

$8 + 7 = 15$

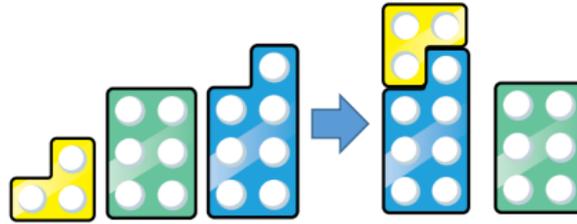
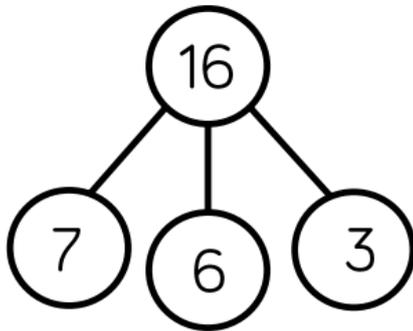
When adding one-digit numbers that cross 10, it is important to highlight the importance of ten ones equalling one ten.

Different manipulatives can be used to represent this exchange. Use concrete resources alongside number lines to support children in understanding how to partition their jumps.

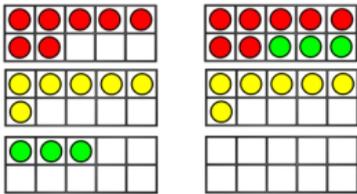


Skill: Add three 1-digit numbers

Year: 2



$$7 + 6 + 3 = 16$$



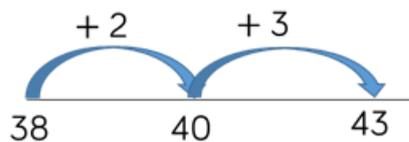
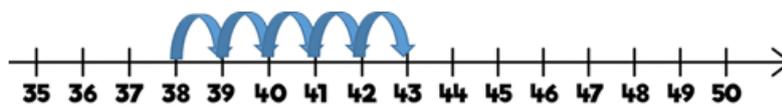
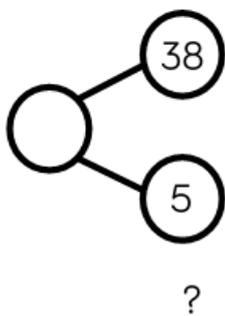
When adding three 1-digit numbers, children should be encouraged to look for number bonds to 10 or doubles to add the numbers more efficiently.

This supports children in their understanding of commutativity.

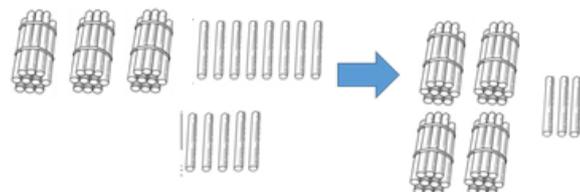
Manipulatives that highlight number bonds to 10 are effective when adding three 1-digit numbers.

Skill: Add 1-digit and 2-digit numbers to 100

Year: 2/3



$$38 + 5 = 43$$



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

When adding single digits to a two-digit number, children should be encouraged to count on from the larger number.

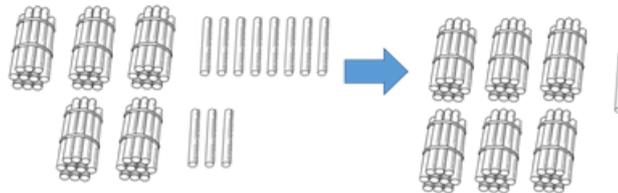
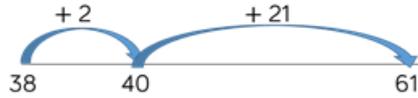
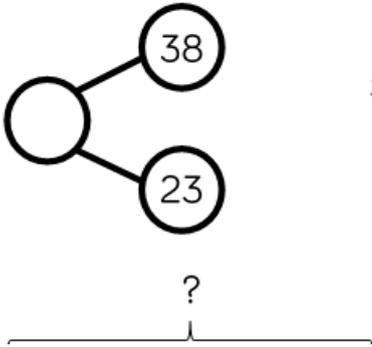
They should also apply their knowledge of number bonds to add more efficiently e.g. $8 + 5 = 13$ so $38 + 5 = 43$.

Hundred squares and straws can support children to find the number bond to 10.



Skill: Add two 2-digit numbers to 100

Year: 2/3



$$38 + 23 = 61$$

Tens	Ones

	..

$$\begin{array}{r} 38 \\ + 23 \\ \hline 61 \\ 1 \end{array}$$

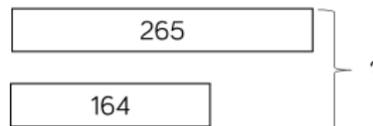
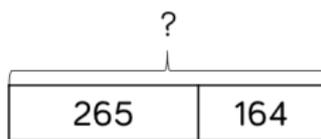
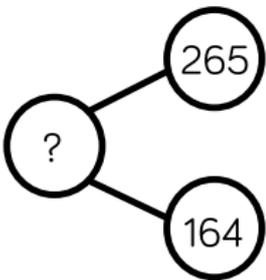
Tens	Ones
10 10 10	1 1 1 1
10 10	1 1 1
10	1 1 1

At this stage, encourage children to use the formal column method when calculating alongside straws, base 10 or place value counters. As numbers become larger, straws become less efficient.

Children can also use a blank number line to count on to find the total. Encourage them to jump to multiples of 10 to become more efficient.

Skill: Add numbers with up to 3 digits

Year: 3



$$265 + 164 = 429$$

Hundreds	Tens	Ones
■ ■	
■	
■		..

$$\begin{array}{r} 265 \\ + 164 \\ \hline 429 \\ 1 \end{array}$$

Hundreds	Tens	Ones
100 100	10 10 10 10	1 1 1 1
100	10 10 10 10	1 1 1 1
100	10 10	1 1 1

Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 3 digits.

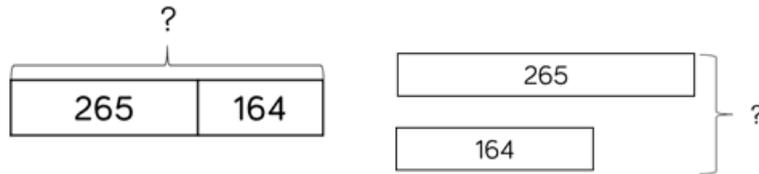
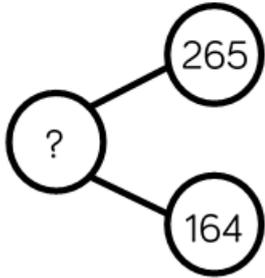
Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

Plain counters on a place value grid can also be used to support learning.

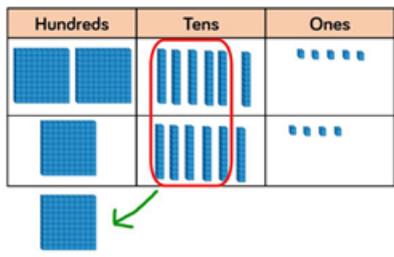


Skill: Add numbers with up to 3 digits

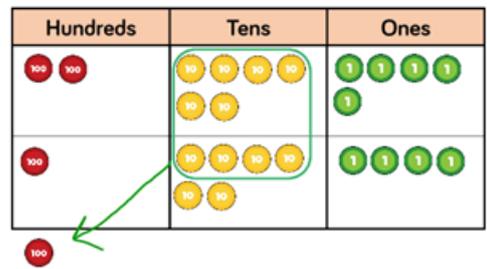
Year: 3



$$265 + 164 = 429$$



$$\begin{array}{r} 265 \\ + 164 \\ \hline 429 \\ 1 \end{array}$$



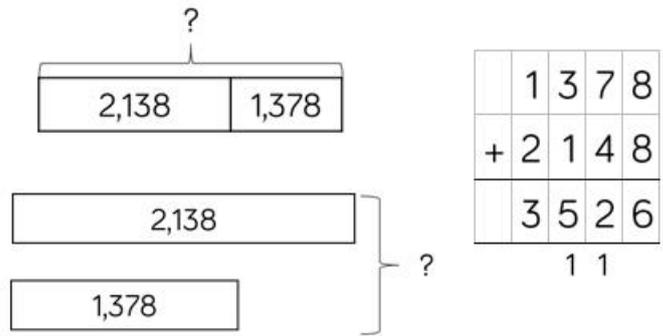
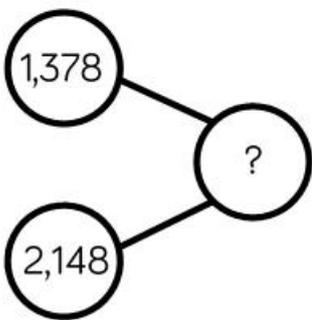
Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 3 digits.

Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

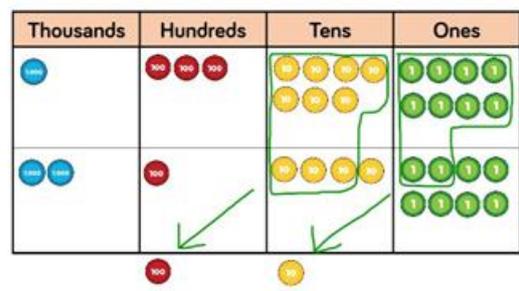
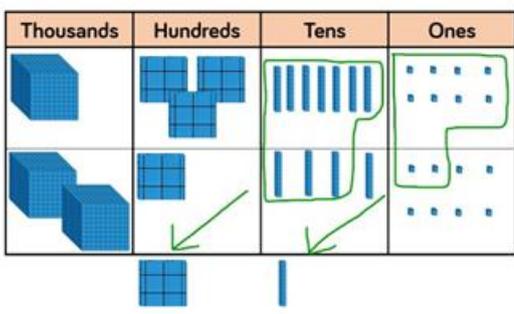
Plain counters on a place value grid can also be used to support learning.

Skill: Add numbers with up to 4 digits

Year: 4



$$1,378 + 2,148 = 3,526$$



Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 4 digits.

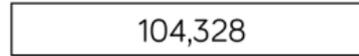
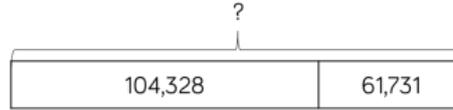
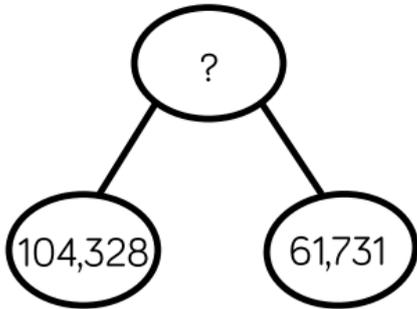
Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

Plain counters on a place value grid can also be used to support learning.



Skill: Add numbers with more than 4 digits

Year: 5/6



$$104,328 + 61,731 = 166,059$$

HTh	TTh	Th	H	T	O
100,000		1,000 1,000 1,000 1,000	100 100 100	10 10	1 1 1 1 1 1 1 1
	10,000 10,000 10,000 10,000	1,000	100 100 100 100 100 100 100	10 10 10 10	1

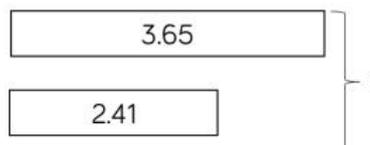
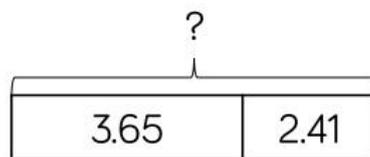
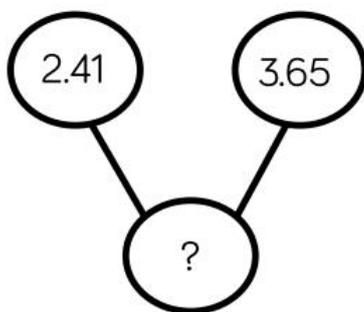
1	0	4	3	2	8
+	6	1	7	3	1
1	6	6	0	5	9
					1

Place value counters or plain counters on a place value grid are the most effective concrete resources when adding numbers with more than 4 digits.

At this stage, children should be encouraged to work in the abstract, using the column method to add larger numbers efficiently.

Skill: Add with up to 3 decimal places

Year: 5



$$3.65 + 2.41 = 6.06$$

$$\begin{array}{r} 3.65 \\ + 2.41 \\ \hline 6.06 \\ 1 \end{array}$$

Ones	Tenths	Hundredths
1 1 1	0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01
1 1	0.1 0.1 0.1 0.1	0.01
1		

Ones	Tenths	Hundredths
3	6	5
2	4	1
6	0	6
		1

Place value counters and plain counters on a place value grid are the most effective manipulatives when adding decimals with 1, 2 and then 3 decimal places.

Ensure children have experience of adding decimals with a variety of decimal places. This includes putting this into context when adding money and other measures.



Subtraction

Skill	Year	Representation and models
To count back	EYFS	Number shapes Five frames Ten frames (within 10) Bead strings (10) Numicon Linking cubes Part-whole models Number tracks
Subtract two 1-digit numbers to 10	1	Part- whole models Bar models Number shapes Ten frames (within 10) Bead strings (10) Number tracks
Subtract 1 and 2-digit numbers to 20	1	Part- whole models Bar models Number shapes Ten frames (within 20) Bead strings (20) Number tracks Number lines (labelled) Straws
Subtract 1 and 2-digit numbers to 100	2	Part- whole models Bar models Number shapes Ten frames (within 20) Number lines (labelled) Hundred square
Subtract two 2-digit numbers	2	Part- whole models Bar models Number lines (blank) Straws Base 10 Place value counters

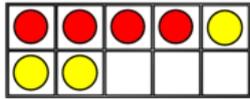
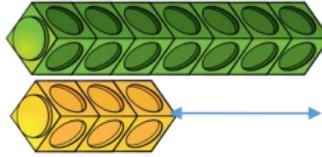
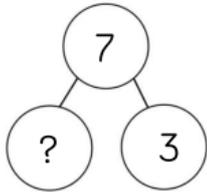


Subtract up to 3-digits	3	Part-whole model Bar model Base 10 Place value counters Column subtraction
Subtract up to 4-digits	4	Part-whole model Bar model Base 10 Place value counters Column subtraction
Subtract with more than 4 digits	5	Part-whole model Bar model Place value counters Column subtraction
Subtract up to 3 decimal places	5	Part-whole model Bar model Place value counters Column addition

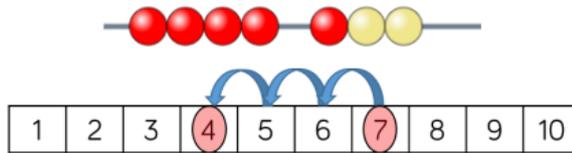
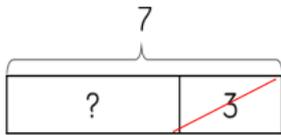
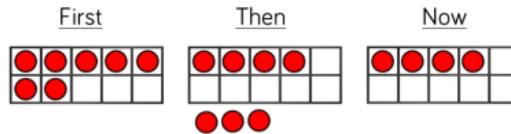


Skill: Subtract 1-digit numbers within 10

EYFS and Year 1



$$7 - 3 = 4$$



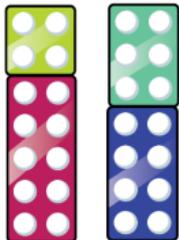
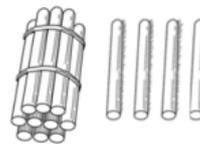
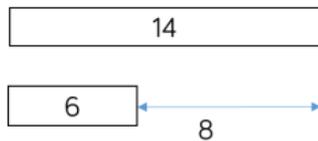
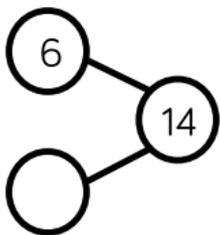
Part-whole models, bar models, ten frames and number shapes support partitioning.

Ten frames, number tracks, single bar models and bead strings support reduction.

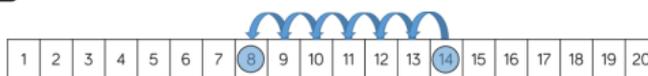
Cubes and bar models with two bars can support finding the difference.

Skill: Subtract 1 and 2-digit numbers to 20

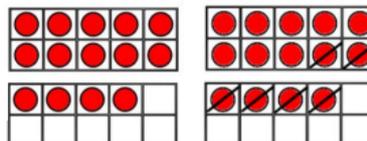
Year: 1/2



$$14 - 6 = 8$$



$$14 - 6 = 8$$



$$14 - 6 = 8$$

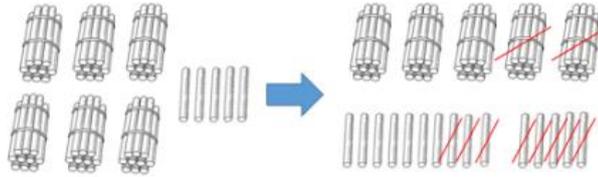
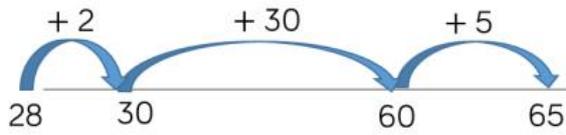
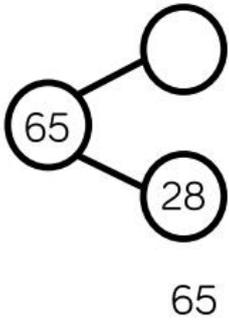
When subtracting one-digit numbers that cross 10, it is important to highlight the importance of ten ones equalling one ten.

Children should be encouraged to find the number bond to 10 when partitioning the subtracted number. Ten frames, number shapes and number lines are particularly useful for this.



Skill: Subtract 1 and 2-digit numbers to 100

Year: 2



65	
?	28

$$65 - 28 = 37$$

Tens	Ones

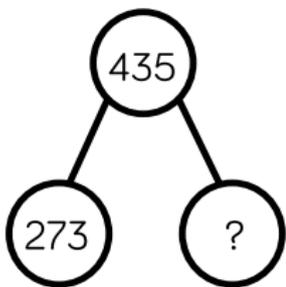
Tens	Ones

At this stage, encourage children to use the formal column method when calculating alongside straws, base 10 or place value counters. As numbers become larger, straws become less efficient.

Children can also use a blank number line to count on to find the difference. Encourage them to jump to multiples of 10 to become more efficient.

Skill: Subtract numbers with up to 3 digits

Year: 3



435	
273	?

435
273
← ?

$$435 - 273 = 262$$

Hundreds	Tens	Ones

$$\begin{array}{r} 3 1 \\ 435 \\ - 273 \\ \hline 262 \end{array}$$

Hundreds	Tens	Ones

Base 10 and place value counters are the most effective manipulative when subtracting numbers with up to 3 digits.

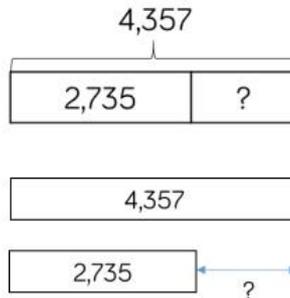
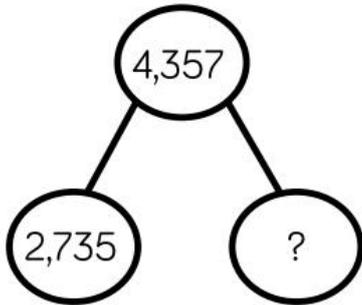
Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

Plain counters on a place value grid can also be used to support learning.



Skill: Subtract numbers with up to 4 digits

Year: 4



$$\begin{array}{r} 3 \ 1 \\ \cancel{4}357 \\ - 2735 \\ \hline 1622 \end{array}$$

$$4,357 - 2,735 = 1,622$$

Thousands	Hundreds	Tens	Ones

Thousands	Hundreds	Tens	Ones

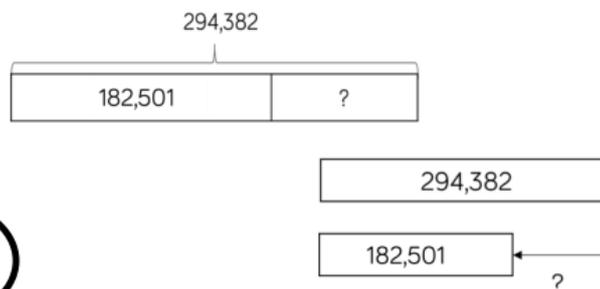
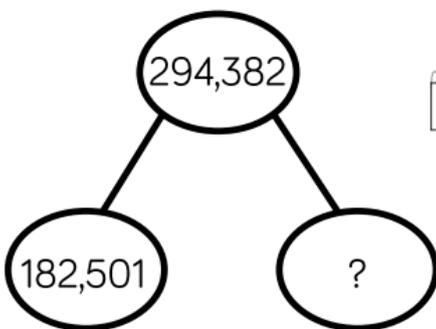
Base 10 and place value counters are the most effective manipulatives when subtracting numbers with up to 4 digits.

Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

Plain counters on a place value grid can also be used to support learning.

Skill: Subtract numbers with more than 4 digits

Year: 5/6



$$294,382 - 182,501 = 111,881$$

HTh	TTh	Th	H	T	O

	2	9	3	¹ 3	8	2
-	1	8	2	5	0	1
	1	1	1	8	8	1

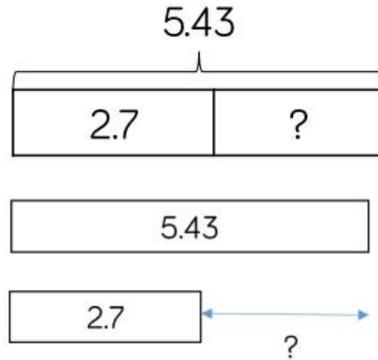
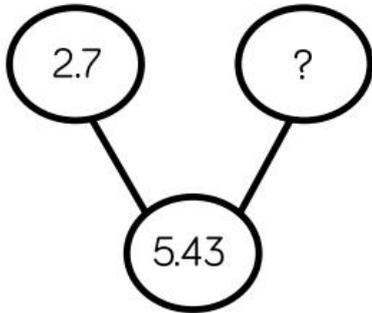
Place value counters or plain counters on a place value grid are the most effective concrete resource when subtracting numbers with more than 4 digits.

At this stage, children should be encouraged to work in the abstract, using column method to subtract larger numbers efficiently.



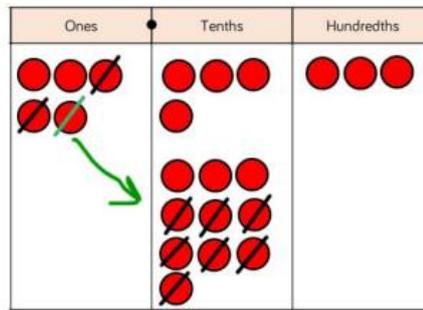
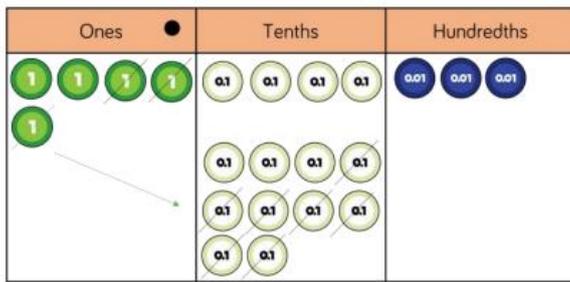
Skill: Subtract with up to 3 decimal places

Year: 5



$$\begin{array}{r} 4 \quad 1 \\ 5.43 \\ - 2.7 \\ \hline 2.73 \end{array}$$

$5.43 - 2.7 = 2.73$



Place value counters and plain counters on a place value grid are the most effective manipulative when subtracting decimals with 1, 2 and then 3 decimal places.

Ensure children have experience of subtracting decimals with a variety of decimal places. This includes putting this into context when subtracting money and other measures.

$$\begin{array}{r} 4 \quad 1 \\ 5.43 \\ - 2.7 \\ \hline 2.73 \end{array} \quad \rightarrow \quad \begin{array}{r} 4 \quad 1 \\ 5.43 \\ - 2.70 \\ \hline 2.73 \end{array}$$

When subtracting decimals with a different number of decimal places, children should use 0 as a place holder.



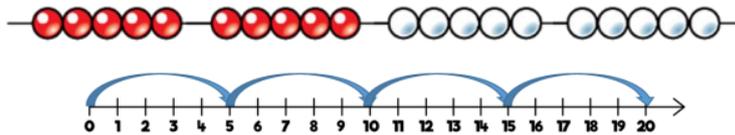
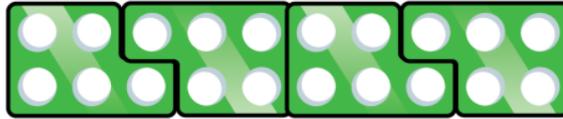
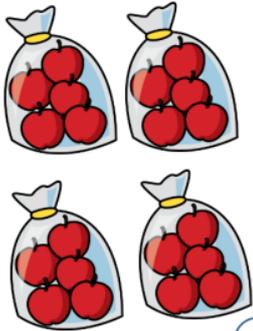
Multiplication

Skill	Year	Representation and models
Solve one-step problems with multiplication	1/2	Counters Bar models Number shapes Ten frames Bead strings Number lines
Multiply 2 digit by 1-digit numbers	3/4	Base 10 Place value counters Short written method
Multiply 3 digit by 1-digit numbers	4	Base 10 Place value counters Short written method
Multiply 4 digit by 1-digit numbers	5	Place value counters Short written method
Multiply 2-digit by 2-digit numbers	5	Grid method Short written method Long written method
Multiply 2-digit by 3-digit numbers	5	Grid method Short written method Long written method
Multiply 2-digit by 4-digit numbers	5/6	Short written method Long written method

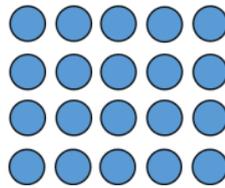
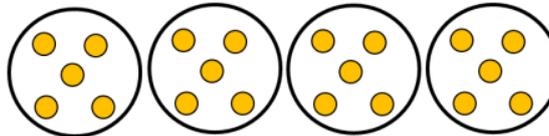
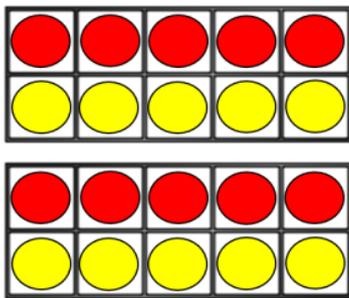


Skill: Solve 1-step problems using multiplication

Year: 1/2



One bag holds 5 apples.
How many apples do 4 bags hold?



$$5 + 5 + 5 + 5 = 20$$

$$4 \times 5 = 20$$

$$5 \times 4 = 20$$

Children represent multiplication as repeated addition in many different ways.

In Year 1, children use concrete and pictorial representations to solve problems. They are not expected to record multiplication formally.

In Year 2, children are introduced to the multiplication symbol.

Skill: Multiply 2-digit numbers by 1-digit numbers

Year: 3/4

$$34 \times 5 = 170$$

	H	T	O	
		3	4	
x			5	
	1	7	0	
	1	2		



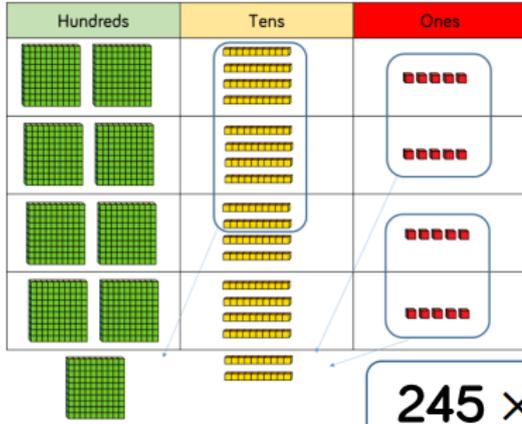
Teachers may decide to first look at the expanded column method before moving on to the short multiplication method.

The place value counters should be used to support the understanding of the method rather than supporting the multiplication, as children should use times table knowledge.



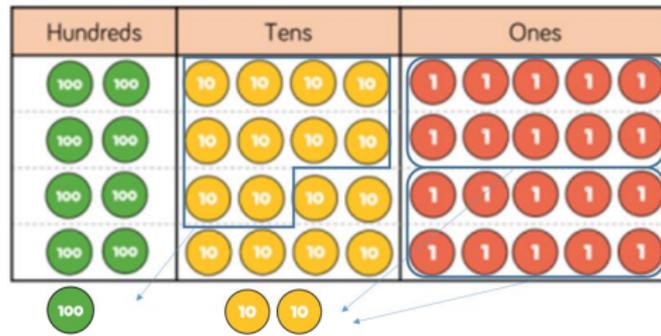
Skill: Multiply 3-digit numbers by 1-digit numbers

Year: 3/4



	H	T	O
	2	4	5
x			4
	9	8	0
	1	2	

$$245 \times 4 = 980$$

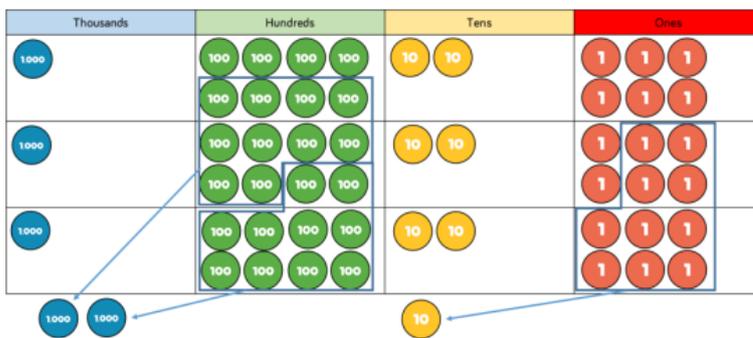


When moving to 3-digit by 1-digit multiplication, encourage children to move towards the short, formal written method.

Base 10 and place value counters continue to support the understanding of the written method. Limit the number of exchanges needed in the questions and move children away from resources when multiplying larger numbers.

Skill: Multiply 4-digit numbers by 1-digit numbers

Year: 5



$$1,826 \times 3 = 5,478$$

	Th	H	T	O
	1	8	2	6
x				3
	5	4	7	8
	2		1	

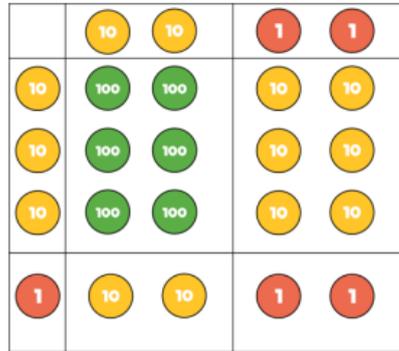
When multiplying 4-digit numbers, place value counters are the best manipulative to use to support children in their understanding of the formal written method.

If children are multiplying larger numbers and struggling with their times tables, encourage the use of multiplication grids so children can focus on the use of the written method.



Skill: Multiply 2-digit numbers by 2-digit numbers

Year: 5



×	20	2
30	600	60
1	20	2

	H	T	O
		2	2
×		3	1
		2	2
	6	6	0
	6	8	2

The grid method matches the area model as an initial written method before moving on to the formal written multiplication method.

$22 \times 31 = 682$

Skill: Multiply 3-digit numbers by 2-digit numbers

Year: 5

	Th	H	T	O
		2	3	4
×			3	2
		4	6	8
¹ 7	¹ 0	2	0	
7	4	8	8	

×	200	30	4
30	6,000	900	120
2	400	60	8

Encourage children to move towards the formal written method, seeing the links with the grid method.

$234 \times 32 = 7,488$



Skill: Multiply 4-digit numbers by 2-digit numbers

Year: 5/6

TTh	Th	H	T	O
	2	7	3	9
×			2	8
2	1	9	1	2
2	5	3	7	
5	4	7	8	0
1		1		
7	6	6	9	2

1

$$2,739 \times 28 = 76,692$$

When multiplying 4-digits by 2-digits, children should be confident in the written method.

If they are still struggling with times tables, provide multiplication grids to support when they are focusing on the use of the method.

Consider where exchanged digits are placed and make sure this is consistent.



Division

Skill	Year	Representation and models
Solve one-step problems with division (sharing)	1/2	Bar model Real life objects Arrays Counters
Solve one-step problems with division (grouping)	1/2	Bar model Real life objects Arrays Counters Number shapes Bead strings Number lines
Divide 2 digit by 1-digit numbers (no exchanging)	3	Straws Base 10 Bar model Place value counters Part-whole models
Divide 2 digit by 1-digit numbers (exchanging)	3	Straws Base 10 Bar model Place value counters Part-whole models
Divide 2 digit by 1-digit numbers (exchanging with remainders)	3/4	Straws Base 10 Bar model Place value counters Part-whole models
Divide 2 digit by 1-digit numbers (grouping)	4	Place value counters Counters Place value grid Written short method
Divide 3 digit by 1-digit numbers (exchanging)	4	Base 10 Bar model Place value counters Part-whole model

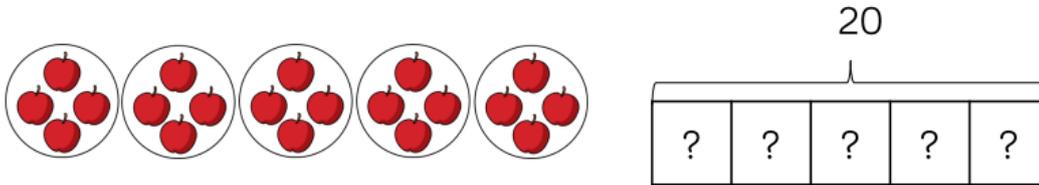


Divide 3 digit by 1-digit numbers (grouping)	4/5	Place value counters Counters Place value grid Written short method
Divide 4 digit by 1-digit numbers (grouping)	5	Place value counters Counters Place value grid Written short method
Divide multi-digits by 2-digits (short division)	6	Short written method
Divide multi-digits by 2-digits (Long division)	6	Long written method

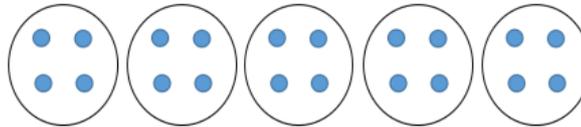
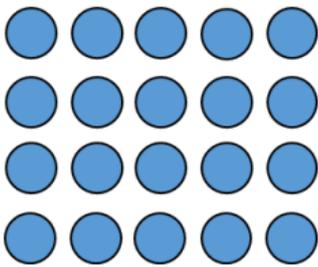


Skill: Solve 1-step problems using multiplication (sharing)

Year: 1/2



There are 20 apples altogether.
They are shared equally between 5 bags.
How many apples are in each bag?



$$20 \div 5 = 4$$

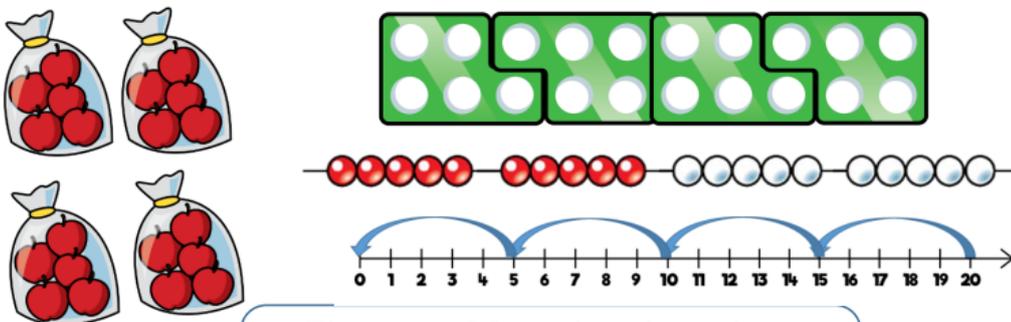
Children solve problems by sharing amounts into equal groups.

In Year 1, children use concrete and pictorial representations to solve problems. They are not expected to record division formally.

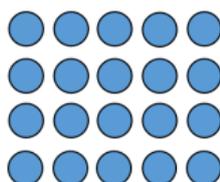
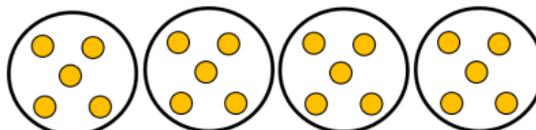
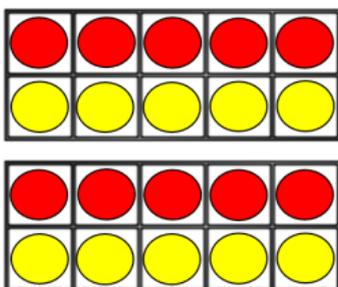
In Year 2, children are introduced to the division symbol.

Skill: Solve 1-step problems using division (grouping)

Year: 1/2



There are 20 apples altogether.
They are put in bags of 5.
How many bags are there?



$$20 \div 5 = 4$$

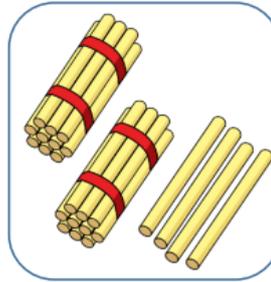
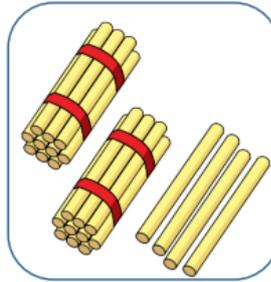
Children solve problems by grouping and counting the number of groups. Grouping encourages children to count in multiples and links to repeated subtraction on a number line. They can use concrete representations in fixed groups such as number shapes which helps to show the link between multiplication and division.



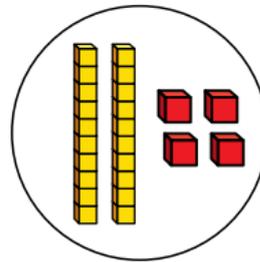
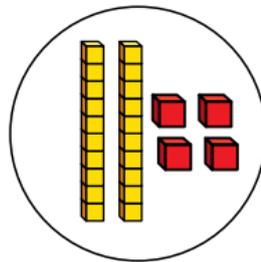
Skill: Divide 2-digits by 1-digit (sharing with no exchange)

Year: 1/2

Tens	Ones
10 10	1 1 1 1
10 10	1 1 1 1



$$48 \div 2 = 24$$

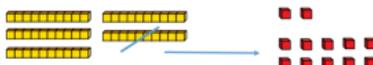


When dividing larger numbers, children can use manipulatives that allow them to partition into tens and ones.

Straws, Base 10 and place value counters can all be used to share numbers into equal groups.

Skill: Divide 2-digits by 1-digit (sharing with exchange)

Year: 3/4



Tens	Ones
10	1 1 1
10	1 1 1
10	1 1 1
10	1 1 1

52

?	?	?	?
---	---	---	---

$$52 \div 4 = 13$$

Tens	Ones
10	1 1 1
10	1 1 1
10	1 1 1
10	1 1 1

When dividing numbers involving an exchange, children can use Base 10 and place value counters to exchange one ten for ten ones.

Children should start with the equipment outside the place value grid before sharing the tens and ones equally between the rows.

Flexible partitioning in a part-whole model supports this method.



Skill: Divide 2-digits by 1-digit (sharing with remainders)

Year: 3/4

53

13	13	13	13	1
----	----	----	----	---

$53 \div 4 = 13 \text{ r}1$

When dividing numbers with remainders, children can use Base 10 and place value counters to exchange one ten for ten ones. Starting with the equipment outside the place value grid will highlight remainders, as they will be left outside the grid once the equal groups have been made.

Skill: Divide 2-digits by 1-digit (grouping)

Year: 4

		1	3
4	5	1	2

$52 \div 4 = 13$

When using the short division method, children use grouping. Starting with the largest place value, they group by the divisor.

Language is important here. Children should consider 'How many groups of 4 tens can we make?' and 'How many groups of 4 ones can we make?'

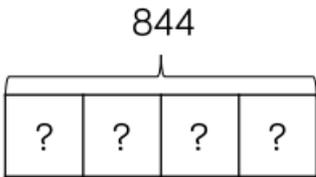
Remainders can also be seen as they are left ungrouped.



Skill: Divide 3-digits by 1-digit (sharing)

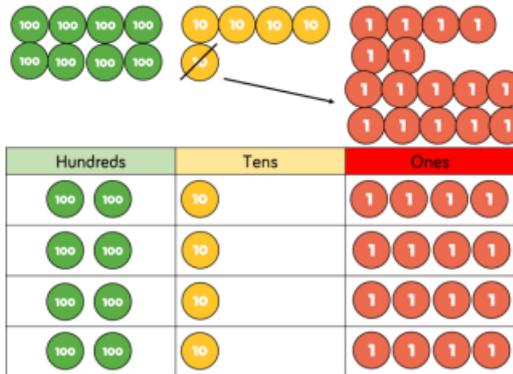
Year: 4

$$844 \div 4 = 211$$



H	T	O
100 100	10	1
100 100	10	1
100 100	10	1
100 100	10	1

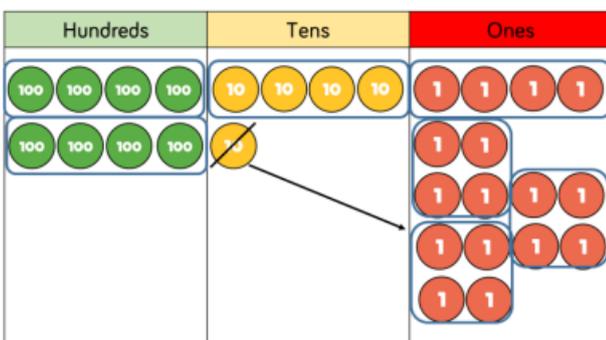
$$844 \div 4 = 211$$



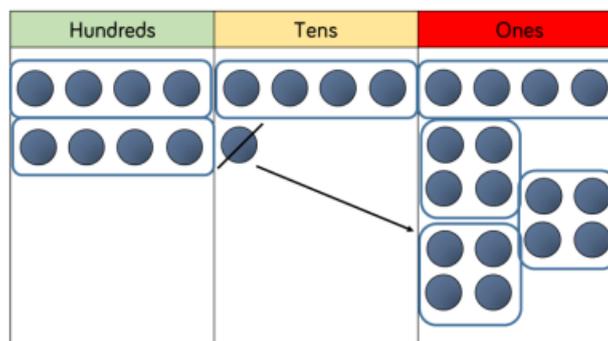
Children can continue to use place value counters to share 3-digit numbers into equal groups. Children should start with the equipment outside the place value grid before sharing the hundreds, tens and ones equally between the rows. This method can also help to highlight remainders.

Skill: Divide 3-digits by 1-digit (grouping)

Year: 5



		2	1	4
4	8	5	16	



$$856 \div 4 = 214$$

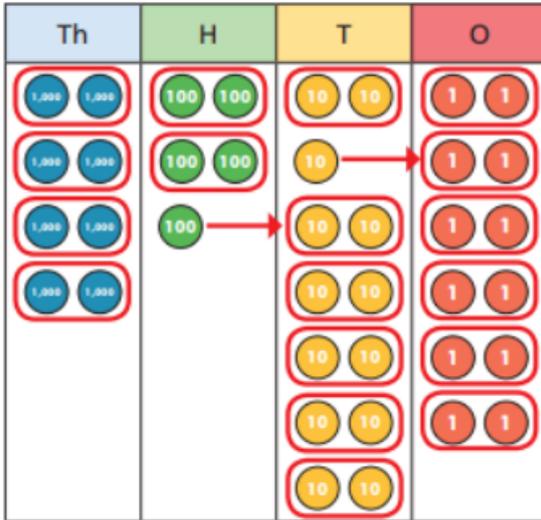
Children can continue to use grouping to support their understanding of short division when dividing a 3-digit number by a 1-digit number.

Place value counters or plain counters can be used on a place value grid to support this understanding. Children can also draw their own counters and group them through a more pictorial method.



Skill: Divide 4-digits by 1-digit (grouping)

Year: 5



	4	2	6	6
2	8	5	13	12

Place value counters or plain counters can be used on a place value grid to support children to divide 4-digits by 1-digit. Children can also draw their own counters and group them through a more pictorial method.

Children should be encouraged to move away from the concrete and pictorial when dividing numbers with multiple exchanges.

$$8,532 \div 2 = 4,266$$

Skill: Divide multi digits by 2-digits (short division)

Year: 6

		0	3	6
	12	4	43	72

$$432 \div 12 = 36$$

When children begin to divide up to 4-digits by 2-digits, written methods become the most accurate as concrete and pictorial representations become less effective. Children can write out multiples to support their calculations with larger remainders. Children will also solve problems with remainders where the quotient can be rounded as appropriate.

$$7,335 \div 15 = 489$$

Children can list multiples

15	30	45	60	75	90	105	120	135	150
----	----	----	----	----	----	-----	-----	-----	-----

	0	4	8	9
15	7	73	133	135



Skill: Divide multi-digits by 2-digits (long division)

Year: 6

		0	3	6
1	2	4	3	2
	-	3	6	0
			7	2
	-		7	2
				0

- (x30) $12 \times 1 = 12$
- $12 \times 2 = 24$
- $12 \times 3 = 36$
- $12 \times 4 = 48$
- $12 \times 5 = 60$
- (x6) $12 \times 6 = 72$
- $12 \times 7 = 84$
- $12 \times 8 = 96$
- $12 \times 9 = 108$
- $12 \times 10 = 120$

$$432 \div 12 = 36$$

Children can also divide by 2-digit numbers using long division.

Children can write out multiples to support their calculations with larger remainders.

Children will also solve problems with remainders where the quotient can be rounded as appropriate.

$$7,335 \div 15 = 489$$

		0	4	8	9
15	7	3	3	5	
	-	6	0	0	0
		1	3	3	5
	-	1	2	0	0
			1	3	5
	-		1	3	5
					0

- (x400) $1 \times 15 = 15$
- $2 \times 15 = 30$
- $3 \times 15 = 45$
- (x80) $4 \times 15 = 60$
- $5 \times 15 = 75$
- (x9) $10 \times 15 = 150$

Skill: Divide multi digits by 2-digits (long division)

Year: 6

$$372 \div 15 = 24 \text{ r}12$$

			2	4	r	1	2
1	5	3	7	2			
	-	3	0	0			
			7	2			
	-		6	0			
			1	2			

- $1 \times 15 = 15$
- $2 \times 15 = 30$
- $3 \times 15 = 45$
- $4 \times 15 = 60$
- $5 \times 15 = 75$
- $10 \times 15 = 150$

When a remainder is left at the end of a calculation, children can either leave it as a remainder or convert it to a fraction. This will depend on the context of the question.

Children can also answer questions where the quotient needs to be rounded according to the context.

15			2	4	$\frac{4}{5}$
30	1	5	3	7	2
45		-	3	0	0
60				7	2
75		-		6	0
				1	2

$$372 \div 15 = 24 \frac{4}{5}$$



Times Tables

Skill	Year	Representation and models
2 x tables	2	Bar model Number shapes Counters Money Ten frames Bead strings Number lines Everyday objects
5 x tables	2	Bar model Number shapes Counters Money Ten frames Bead strings Number lines Everyday objects
10 x tables	2	Bar model Number shapes Counters Money Ten frames Bead strings Number lines Base 10
3 x tables	3	Hundred square Number shapes Counters Bead string Number line
4 x tables	3	Hundred square Number shapes Counters Bead string Number line

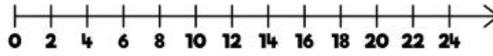
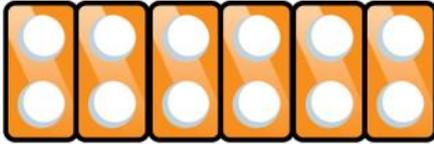


8 x tables	3	Hundred square Bead string Number line
6 x tables	4	Hundred square Bead string Number line
7 x tables	4	Hundred square Bead string Number line
9 x tables	4	Hundred square Number line
11 x tables	4	Hundred square Number line
12 x tables	4	Hundred square Number line

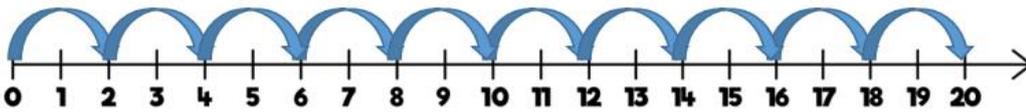
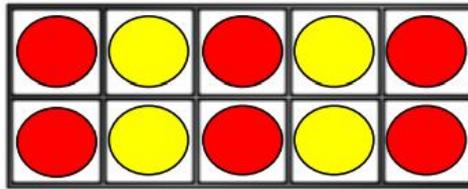


Skill: 2 times table

Year: 2



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



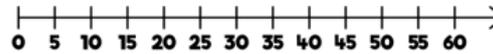
Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line or a hundred square.

Look for patterns in the two times table, using concrete manipulatives to support. Notice how all the numbers are even and there is a pattern in the ones.

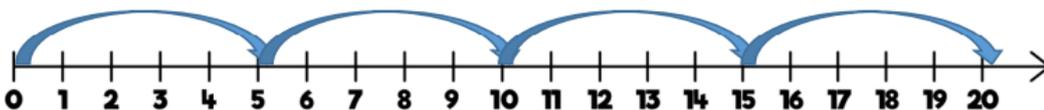
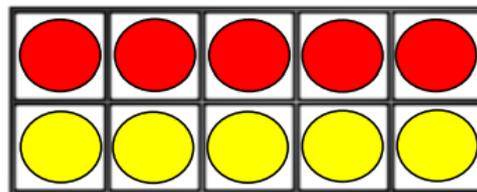
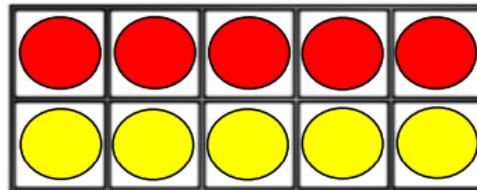
Use different models to develop fluency.

Skill: 5 times table

Year: 2



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



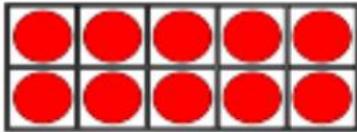
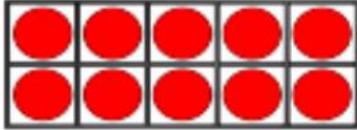
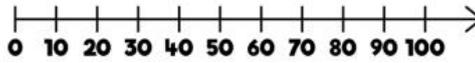
Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line or a hundred square.

Look for patterns in the five times table, using concrete manipulatives to support. Notice the pattern in the ones as well as highlighting the odd, even, odd, even pattern.

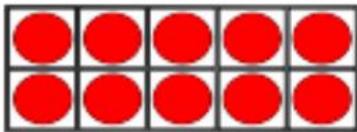


Skill: 10 times table

Year: 2



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

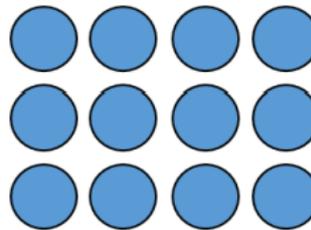
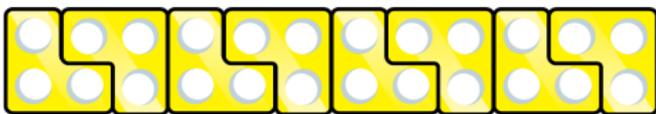


Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line or a hundred square.

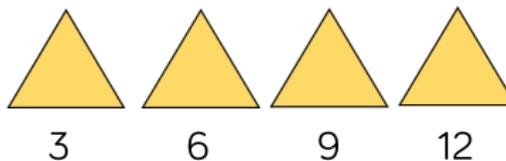
Look for patterns in the ten times table, using concrete manipulatives to support. Notice the pattern in the digits- the ones are always 0, and the tens increase by 1 ten each time.

Skill: 3 times table

Year: 3



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



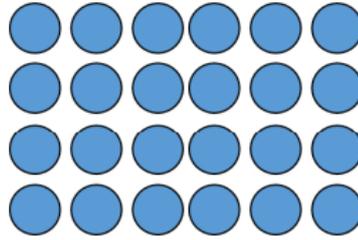
Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line or a hundred square.

Look for patterns in the three times table, using concrete manipulatives to support. Notice the odd, even, odd, even pattern using number shapes to support. Highlight the pattern in the ones using a hundred square.

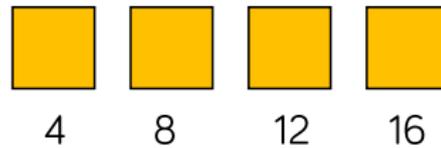


Skill: 4 times table

Year: 3

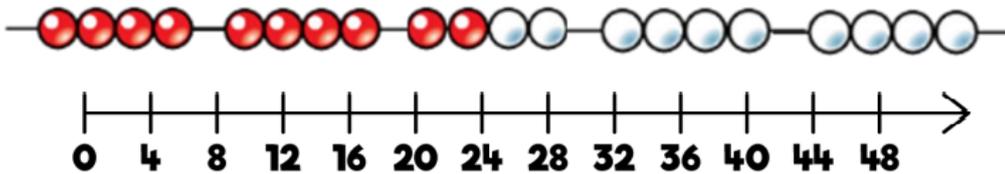


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



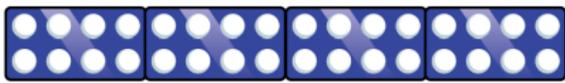
4	8	12	16	20
24	28	32	36	40
44	48	52	56	60

Encourage daily counting in multiples, supported by a number line or a hundred square. Look for patterns in the four times table, using manipulatives to support. Make links to the 2 times table, seeing how each multiple is double the twos. Notice the pattern in the ones within each group of five multiples. Highlight that all the multiples are even using number shapes to support.



Skill: 8 times table

Year: 3



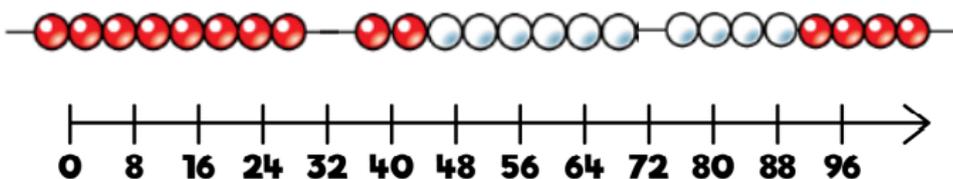
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



8 16 24 32

8	16	24	32	40
48	56	64	72	80

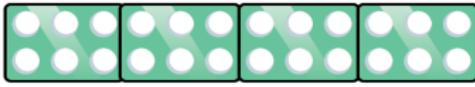
Encourage daily counting in multiples, supported by a number line or a hundred square. Look for patterns in the eight times table, using manipulatives to support. Make links to the 4 times table, seeing how each multiple is double the fours. Notice the pattern in the ones within each group of five multiples. Highlight that all the multiples are even using number shapes





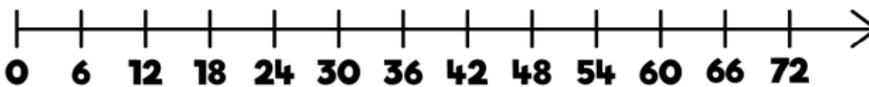
Skill: 6 times table

Year: 4



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

6	12	18	24	30
36	42	48	54	60
66	72	78	84	90



Encourage daily counting in multiples, supported by a number line or a hundred square. Look for patterns in the six times table, using manipulatives to support. Make links to the 3 times table, seeing how each multiple is double the threes. Notice the pattern in the ones within each group of five multiples. Highlight that all the multiples are even using number shapes to support.

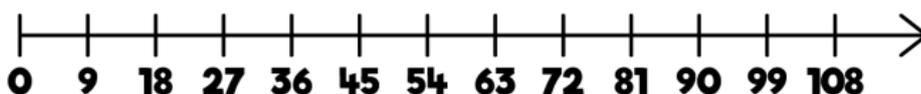
Skill: 9 times table

Year: 4



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

9	18	27	36	45
54	63	72	81	90



Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line or a hundred square. Look for patterns in the nine times table, using concrete manipulatives to support. Notice the pattern in the tens and ones using the hundred square to support as well as noting the odd, even pattern within the multiples.



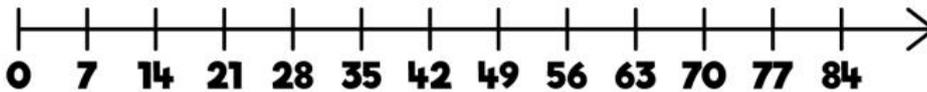
Skill: 7 times table

Year: 4



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

7	14	21	28	35
42	49	56	63	70



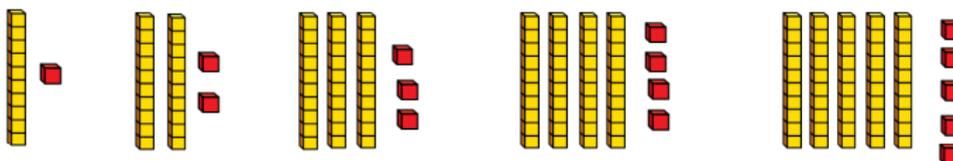
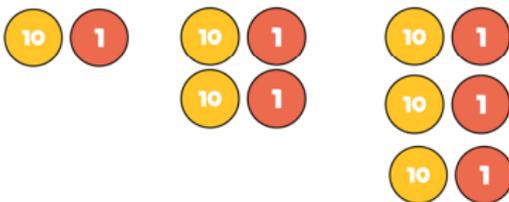
Encourage daily counting in multiples both forwards and backwards, supported by a number line or a hundred square. The seven times table can be trickier to learn due to the lack of obvious pattern in the numbers, however they already know several facts due to commutativity. Children can still see the odd, even pattern in the multiples using number shapes to support.

Skill: 11 times table

Year: 4

11	22	33	44	55	66
77	88	99	110	121	132

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line or a hundred square.

Look for patterns in the eleven times table, using concrete manipulatives to support. Notice the pattern in the tens and ones using the hundred square to support. Also consider the pattern after crossing 100

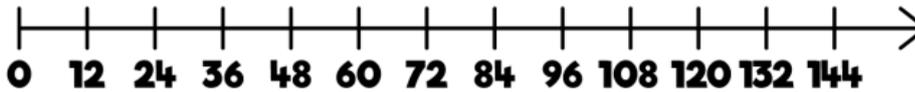
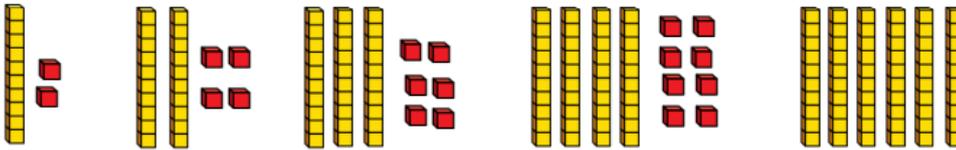
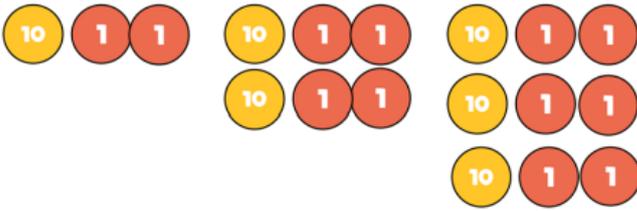


Skill: 12 times table

Year: 4

12	24	36	48	60
72	84	96	108	120
132	144			

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Encourage daily counting in multiples, supported by a number line or a hundred square. Look for patterns in the 12 times table, using manipulatives to support. Make links to the 6 times table, seeing how each multiple is double the sixes. Notice the pattern in the ones within each group of five multiples. The hundred square can support in highlighting this pattern.



Vocabulary

EYFS

NUMBER

Number and place value

Number

zero

number

one, two, three ... to twenty and beyond
teens numbers, eleven, twelve ... twenty
none

how many ...?

count, count (up) to, count on (from, to),
count back (from, to)

count in ones, twos, fives, tens

is the same as

more, less

odd, even

few

pattern

pair

Place value

ones

tens

digit

the same number as, as many as
more, larger, bigger, greater

fewer, smaller, less

fewest, smallest, least

most, biggest, largest, greatest

one more, ten more

one less, ten less

compare

order

size

Estimating

guess

how many ...?

estimate

nearly

close to

about the same as

just over, just under

too many, too few

enough, not enough

Addition and subtraction

add, more, and

make, sum, total

altogether

double

one more, two more ... ten more

how many more to make ...?

how many more is ... than ...?

how much more is ...?

take away

how many are left/left over?

how many have gone?

one less, two less, ten less ...

how many fewer is ... than ...?

how much less is ...?

difference between

Multiplication and division

sharing

doubling

halving

number patterns

Vocabulary

EYFS

MEASUREMENT

measure
size
compare
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as
just over, just under

Length

metre
length, height, width, depth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so on
far, near, close

Weight

weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

full
empty
half full
holds
container

Time

time
days of the week, Monday, Tuesday ...
day, week
birthday, holiday
morning, afternoon, evening, night
bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
next, last
now, soon, early, late
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
hour, o'clock
clock, watch, hands

Money

money
coin
penny, pence, pound
price, cost
buy, sell
spend, spent
pay

GEOMETRY

Properties of shape

shape, pattern
flat
curved, straight
round
hollow, solid
sort
make, build, draw
size



Vocabulary

EYFS

bigger, larger, smaller
symmetrical
pattern, repeating pattern
match

2-D shape

corner, side
rectangle (including square)
circle
triangle

3-D shape

face, edge, vertex, vertices
cube
pyramid
sphere
cone

Position and direction

position
over, under
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
beside, next to
opposite
apart
between
middle, edge
corner
direction
left, right
up, down
forwards, backwards, sideways

across
next to, close, near, far
along
through
to, from, towards, away from
movement
slide
roll
turn
stretch, bend
whole turn, half turn

STATISTICS

count, sort
group, set
list

GENERAL

pattern
puzzle
what could we try next?
how did you work it out?
recognise
describe
draw
compare
sort



Vocabulary

Year 1

NUMBER

Number and place value

Number

number

numeral

zero

one, two, three ... twenty

teens numbers, eleven, twelve ... twenty

twenty-one, twenty-two ... one hundred

none

how many ...?

count, count (up) to, count on (from, to),
count back (from, to)

forwards

backwards

count in ones, twos, fives, tens

equal to

equivalent to

is the same as

more, less

most, least

many

odd, even

multiple of

few

pattern

pair

Place value

ones

tens

digit

the same number as, as many as

more, larger, bigger, greater

fewer, smaller, less

fewest, smallest, least

most, biggest, largest, greatest

one more, ten more

one less, ten less

equal to

one more, ten more

one less, ten less

compare

order

size

first, second, third... twentieth

last, last but one

before, after

next

between

half-way between

above, below

Estimating

guess

how many ...?

estimate

nearly

roughly

close to

about the same as

just over, just under

too many, too few

enough, not enough

Addition and subtraction

addition

add, more, and

make, sum, total

altogether

double

near double

half, halve

one more, two more ... ten more

how many more to make ...?

how many more is ... than ...?

how much more is ...?



Vocabulary

Year 1

subtract

take away

how many are left/left over?

how many have gone?

one less, two less, ten less ...

how many fewer is ... than ...?

how much less is ...?

difference between

equals

is the same as

number bonds/pairs

missing number

Multiplication and division

multiplication

multiply

multiplied by

multiple

division

dividing

grouping

sharing

doubling

halving

array

number patterns

Fractions

fraction

equal part

equal grouping

equal sharing

parts of a whole

half

one of two equal parts

quarter

one of four equal parts

MEASUREMENT

measure

measurement

size

compare

guess, estimate

enough, not enough

too much, too little

too many, too few

nearly, close to, about the same as

roughly

just over, just under

Length

centimetre, metre

length, height, width, depth

long, short, tall

high, low

wide, narrow

thick, thin

longer, shorter, taller, higher ... and so on

longest, shortest, tallest, highest ... and so on

far, near, close

ruler

metre stick

Weight

kilogram, half kilogram

weigh, weighs, balances

heavy, light

heavier than, lighter than

heaviest, lightest

scales



Vocabulary

Year 1

Capacity and volume

litre, half litre

capacity

volume

full

empty

more than

less than

half full

quarter full

holds

container

Time

time

days of the week, Monday, Tuesday ...

months of the year (January, February ...)

seasons: spring, summer, autumn, winter

day, week, weekend, month, year

birthday, holiday

morning, afternoon, evening, night

bedtime, dinner time, playtime

today, yesterday, tomorrow

before, after

earlier, later

next, first, last

midnight

date

now, soon, early, late

quick, quicker, quickest, quickly

slow, slower, slowest, slowly

old, older, oldest

new, newer, newest

takes longer, takes less time

how long ago?

how long will it be to ...?

how long will it take to ...?

how often?

always, never, often, sometimes

usually

once, twice

hour, o'clock, half past, quarter past,
quarter to

clock, clock face, watch, hands

hour hand, minute hand

hours, minutes

Money

money

coin

penny, pence, pound

price, cost

buy, sell

spend, spent

pay

change

dear, costs more

cheap, costs less, cheaper

costs the same as

how much ...?

how many ...?

total

GEOMETRY

Properties of shape

shape, pattern

flat

curved, straight

round

hollow, solid

sort

make, build, draw

size

bigger, larger, smaller

symmetry, symmetrical, symmetrical pattern

pattern, repeating pattern

match



Vocabulary

Year 1

2-D shape

corner, side

point, pointed

rectangle (including square)

circle

triangle

3-D shape

face, edge, vertex, vertices

cube, cuboid

pyramid

sphere

cone

cylinder

Position and direction

position

over, under, underneath

above, below

top, bottom, side

on, in

outside, inside

around

in front, behind

front, back

beside, next to

opposite

apart

between

middle, edge

centre

corner

direction

journey

left, right

up, down

forwards, backwards, sideways

next to, close, near, far

along

through

to, from, towards, away from

movement

slide

roll

turn

stretch, bend

whole turn, half turn, quarter turn,

three-quarter turn

STATISTICS

count, sort, vote

group, set

list, table

GENERAL

pattern

puzzle

problem, problem solving

mental, mentally

what could we try next?

how did you work it out?

explain your thinking

recognise

describe

draw

compare

sort



Vocabulary

Year 2

NUMBER

Number and place value

Number

number

numeral

zero

one, two, three ... twenty

teens numbers, eleven, twelve ... twenty

twenty-one, twenty-two ... one hundred, **two hundred ... one thousand**

none

how many ...?

count, count (up) to, count on (from, to),
count back (from, to)

forwards

backwards

count in ones, twos, fives, tens, **threes, fours
and so on**

equal to

equivalent to

is the same as

more, less

most, least

tally

many

odd, even

multiple of

sequence

continue

predict

few

pattern

pair, **rule**

> greater than

< less than

Place value

ones

tens, **hundreds**

digit

one-, two- or three-digit number

place, place value

stands for, represents

exchange

the same number as, as many as
more, larger, bigger, greater

fewer, smaller, less

fewest, smallest, least

most, biggest, largest, greatest

one more, ten more

one less, ten less

equal to

compare

order

size

first, second, third ... twentieth

twenty-first, twenty-second ...

last, last but one

before, after

next

between

halfway between

above, below

Estimating

guess

how many ...?

estimate

nearly

roughly

close to

about the same as

just over, just under

exact, exactly



Vocabulary

Year 2

too many, too few
enough, not enough

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
one more, two more ... ten more ... **one hundred more**
how many more to make ...?
how many more is ... than ...?
how much more is ...?
subtract
take away
how many are left/left over?
how many have gone?
one less, two less, ten less ... **one hundred less**
how many fewer is ... than ...?
how much less is ...?
difference between
equals
is the same as
number bonds/pairs/**facts**
tens boundary

Multiplication and division

multiplication
multiply
multiplied by
multiple
groups of
times
once, twice, three times ... ten times
repeated addition

division
dividing, **divide, divided by, divided into**
grouping
sharing, **share, share equally**
left, left over
one each, two each, three each ... ten each
group in pairs, threes ... tens
equal groups of
doubling
halving
array
row, column
number patterns
multiplication table
multiplication fact, division fact

Fractions

fraction
equivalent fraction
mixed number
numerator, denominator
equal part
equal grouping
equal sharing
parts of a whole
half, **two halves**
one of two equal parts
quarter, **two quarters, three quarters**
one of four equal parts
one third, two thirds
one of three equal parts

MEASUREMENT

measure
measurement
size
compare
measuring scale



Vocabulary

Year 2

guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as
roughly
just over, just under

Length

centimetre, metre
length, height, width, depth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so on
far, **further, furthest**, near, close
ruler
metre stick, **tape measure**

Weight

kilogram, half kilogram, **gram**
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre, **millilitre**
capacity
volume
full
empty
more than
less than
half full

quarter full
holds, **contains**
container

Temperature

temperature
degree

Time

time
days of the week, Monday, Tuesday ...
months of the year (January, February ...)
seasons: spring, summer, autumn, winter
day, week, weekend, **fortnight**, month, year
birthday, holiday
morning, afternoon, evening, night
bedtime, dinnertime, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
midnight
date
now, soon, early, late
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
how long ago?
how long will it be to ...?
how long will it take to ...?
how often?
always, never, often, sometimes
usually
once, twice
hour, o'clock, half past, quarter past,
quarter to
5, 10, 15 ... minutes past

Vocabulary

Year 2

clock, clock face, watch, hands
digital/analogue clock/watch, timer
hour hand, minute hand
hours, minutes, seconds

Money

money
coin
penny, pence, pound
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much ...?
how many ...?
total

GEOMETRY

Properties of shape

shape, pattern
flat
curved, straight
round
hollow, solid
sort
make, build, draw
surface
size
bigger, larger, smaller
symmetry, symmetrical, symmetrical pattern
line symmetry
pattern, repeating pattern
match

2-D shape

corner, side
point, pointed
rectangle (including square), rectangular
circle, circular
triangle, triangular
pentagon
hexagon
octagon

3-D shape

face, edge, vertex, vertices
cube, cuboid
pyramid
sphere
cone
cylinder

Position and direction

position
over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey, route
left, right

Vocabulary

Year 2

up, down
higher, lower
forwards, backwards, sideways
across
next to, close, near, far
along
through
to, from, towards, away from
clockwise, anticlockwise
movement
slide
roll
turn
stretch, bend
whole turn, half turn, quarter turn,
three-quarter turn
right angle
straight line

STATISTICS

count, tally, sort, vote
graph, block graph, pictogram
represent
group, set
list, table
label, title
most popular, most common
least popular, least common

GENERAL

pattern
puzzle
problem, problem solving
mental, mentally
what could we try next?
how did you work it out?
show how you ...
explain your thinking

explain your method
describe the pattern
describe the rule
investigate
recognise
describe
draw
compare
sort
mental calculation
written calculation

Vocabulary

Year 3

NUMBER

Number and place value

Number

number
numeral
zero
one, two, three ... twenty
teens numbers, eleven, twelve ... twenty
twenty-one, twenty-two ... one hundred, two
hundred ... one thousand
none
how many ...?
count, count (up) to, count on (from, to),
count back (from, to)
forwards
backwards
count in ones, twos, fives, tens, threes,
fours, **eights**, **fifties** and so on to **hundreds**
equal to
equivalent to
is the same as
more, less
most, least
tally
many
odd, even
multiple of, **factor of**
sequence
continue
predict
few
pattern
pair, rule
relationship
> greater than
< less than
Roman numerals

Place value

ones
tens, hundreds
digit
one-, two- or three-digit number
place, place value
stands for, represents
exchange
the same number as, as many as
more, larger, bigger, greater
fewer, smaller, less
fewest, smallest, least
most, biggest, largest, greatest
one more, ten more, **one hundred more**
one less, ten less, **one hundred less**
equal to
compare
order
size
first, second, third ... twentieth
twenty-first, twenty-second ...
last, last but one
before, after
next
between
halfway between
above, below

Estimating

guess
how many ...?
estimate
nearly
roughly
close to
approximate, approximately
about the same as
just over, just under



Vocabulary

Year 3

exact, exactly
too many, too few
enough, not enough
round, nearest, round to the nearest ten,
hundred
round up, round down

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
one more, two more ... ten more ... one
hundred more
how many more to make ...?
how many more is ... than ...?
how much more is ...?
subtract
take away
how many are left/left over?
how many have gone?
one less, two less, ten less ... one hundred
less
how many fewer is ... than ...?
how much less is ...?
difference between
equals
is the same as
number bonds/pairs/facts
missing number
tens boundary, hundreds boundary

Multiplication and division

multiplication
multiply
multiplied by

multiple, factor
groups of
times
product
once, twice, three times ... ten times
repeated addition
division
dividing, divide, divided by, divided into
left, left over, remainder
grouping
sharing, share, share equally
one each, two each, three each ... ten each
group in pairs, threes ... tens
equal groups of
doubling
halving
array
row, column
number patterns
multiplication table
multiplication fact, division fact

Fractions

fraction
equivalent fraction
mixed number
numerator, denominator
equal part
equal grouping
equal sharing
parts of a whole
half, two halves
one of two equal parts
quarter, two quarters, three quarters
one of four equal parts
one third, two thirds
one of three equal parts
sixths, sevenths, eighths, tenths ...

Vocabulary

Year 3

MEASUREMENT

measure
measurement
size
compare
measuring scale, **division**
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as,
approximately
roughly
just over, just under

Length

millimetre, centimetre, metre, **kilometre**, **mile**
length, height, width, depth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so on
far, further, furthest, near, close
distance apart ... between ... to ... from
perimeter
ruler
metre stick, tape measure

Weight

kilogram, half kilogram, gram
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre, millilitre
capacity
volume
full
empty
more than
less than
half full
quarter full
holds, contains
container

Temperature

temperature
degree
centigrade or **celsius**

Time

time
days of the week, Monday, Tuesday ...
months of the year (January, February ...)
seasons: spring, summer, autumn, winter
day, week, weekend, fortnight, month, year,
century
birthday, holiday
morning, afternoon, evening, night
bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
midnight
calendar, date
now, soon, early, late, **earliest**, **latest**
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest

Vocabulary

Year 3

takes longer, takes less time
how long ago?
how long will it be to ...?
how long will it take to ...?
how often?
always, never, often, sometimes
usually
once, twice
hour, o'clock, half past, quarter past, quarter to
5, 10, 15 ... minutes past
a.m., p.m.
clock, clock face, watch, hands
digital/analogue clock/watch, timer
hour hand, minute hand
hours, minutes, seconds
Roman numerals
12-hour clock time, 24-hour clock time

Money

money
coin
penny, pence, pound
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much ...?
how many ...?
total

GEOMETRY

Properties of shape

shape, pattern

flat
curved, straight
round
hollow, solid
sort
make, build, draw
perimeter
surface
size
bigger, larger, smaller
symmetry, symmetrical, symmetrical pattern
line symmetry
pattern, repeating pattern
match

2-D shape

corner, side
point, pointed
rectangle (including square), rectangular
circle, circular
triangle, triangular
pentagon, **pentagonal**
hexagon, **hexagonal**
octagon, **octagonal**
quadrilateral
right-angled
parallel, perpendicular

3-D shape

face, edge, vertex, vertices
cube, cuboid
pyramid
sphere, **hemisphere**
conc
cylinder
prism, triangular prism

Position and direction

position

Vocabulary

Year 3

over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey, route
left, right
up, down
higher, lower
forwards, backwards, sideways
across
next to, close, near, far
along
through
to, from, towards, away from
clockwise, anticlockwise
compass point
north, south, east, west, N, S, E, W
horizontal, vertical, diagonal
movement
slide
roll
turn
stretch, bend
whole turn, half turn, quarter turn,
three-quarter turn
angle ... is a greater/smaller angle than
right angle

acute angle
obtuse angle
straight line

STATISTICS

count, tally, sort, vote
graph, block graph, pictogram
represent
group, set
list, table, **chart, bar chart, frequency table**
Carroll diagram, Venn diagram
label, title, **axis, axes**
diagram
most popular, most common
least popular, least common

GENERAL

pattern
puzzle
problem, problem-solving
mental, mentally
what could we try next?
how did you work it out?
show how you ...
explain your thinking
explain your method
describe the pattern
describe the rule
investigate
recognise
describe
draw
compare
sort
greatest value, least value
mental calculation
written calculation
statement

Vocabulary

Year 4

NUMBER

Number and place value

Number

number

numeral

zero

one, two, three ... twenty

teens numbers, eleven, twelve ... twenty

twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... **ten thousand, hundred thousand, million**

none

how many ...?

count, count (up) to, count on (from, to), count back (from, to)

forwards

backwards

count in ones, twos, fives, tens, threes, fours, eights, fifties, **sixes, sevens, nines, twenty-fives** and so on to hundreds,

thousands

equal to

equivalent to

is the same as

more, less

most, least

tally

many

odd, even

multiple of, factor of

sequence

continue

predict

few

pattern

pair, rule

relationship

next, consecutive

> greater than

< less than

Roman numerals

integer, positive, negative

above/below zero, minus

negative numbers

Place value

ones

tens, hundreds

digit

one-, two- or three-digit number

place, place value

stands for, represents

exchange

the same number as, as many as

more, larger, bigger, greater

fewer, smaller, less

fewest, smallest, least

most, biggest, largest, greatest

one more, ten more, one hundred more, **one thousand more**

one less, ten less, one hundred less, **one thousand less**

equal to

compare

order

size

first, second, third ... twentieth

twenty-first, twenty-second ...

last, last but on

before, after

next

between

halfway between

above, below

Vocabulary

Year 4

Estimating

guess
how many
estimate
nearly
roughly
close to
approximate, approximately
about the same as
just over, just under
exact, exactly
too many, too few
enough, not enough
round, nearest, round to the nearest ten,
hundred, **thousand**
round up, round down

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
one more, two more... ten more... one
hundred more
how many more to make ...?
how many more is ... than ...?
how much more is ...?
subtract
take away
how many are left/left over?
how many have gone?
one less, two less, ten less ... one hundred
less
how many fewer is ... than ...?
how much less is ...?

difference between
equals
is the same as
number bonds/pairs/facts
missing number
tens boundary, hundreds boundary
inverse

Multiplication and division

multiplication
multiply
multiplied by
multiple, factor
groups of
times
product
once, twice, three times ... ten times
repeated addition
division
dividing, divide, divided by, divided into
left, left over, remainder
grouping
sharing, share, share equally
one each, two each, three each ... ten each
group in pairs, threes ... tens
equal groups of
doubling
halving
array
row, column
number patterns
multiplication table
multiplication fact, division fact
inverse
square, squared
cube, cubed

Vocabulary

Year 4

Fractions (including decimals)

fraction
equivalent fraction
mixed number
numerator, denominator
equal part
equal grouping
equal sharing
parts of a whole
half, two halves
one of two equal parts
quarter, two quarters, three quarters
one of four equal parts
one third, two thirds
one of three equal parts
sixths, sevenths, eighths, tenths ...
hundredths
decimal, decimal fraction, decimal point,
decimal place, decimal equivalent
proportion

MEASUREMENT

measure
measurement
size
compare
unit, standard unit
metric unit
measuring scale, division
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as,
approximately
roughly
just over, just under

Length

millimetre, centimetre, metre, kilometre, mile
length, height, width, depth, **breadth**
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so
on
far, further, furthest, near, close
distance apart ... between ... to ... from
edge, perimeter
area, covers
square centimetre (cm²)
ruler
metre stick, tape measure

Weight

mass: big, bigger, small, smaller
**weight: heavy/light, heavier/lighter, heaviest/
lightest**
kilogram, half kilogram, gram
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre, millilitre
capacity
volume
full
empty
more than
less than
half full
quarter full



Vocabulary

Year 4

holds, contains
container, **measuring cylinder**

Temperature

temperature
degree
centigrade

Time

time
days of the week, Monday, Tuesday ...
months of the year (January, February ...)
seasons: spring, summer, autumn, winter
day, week, weekend, fortnight, month, year,
leap year, century, **millennium**
birthday, holiday
morning, afternoon, evening, night
bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
noon, midnight
calendar, date, **date of birth**
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
how long ago?
how long will it be to ...?
how long will it take to ...?
how often?
always, never, often, sometimes
usually
once, twice
hour, o'clock, half past, quarter past,
quarter to

5, 10, 15 ... minutes past
a.m., p.m.
clock, clock face, watch, hands
digital/analogue clock/watch, timer
hour hand, minute hand
hours, minutes, seconds
timetable, **arrive**, **depart**
Roman numerals
12-hour clock time, 24-hour clock time

Money

money
coin
penny, pence, pound
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much ...?
how many ...?
total

GEOMETRY

Properties of shape

shape, pattern
flat, **line**
curved, straight
round
hollow, solid
sort
make, build, **construct**, draw, **sketch**
perimeter
centre
surface



Vocabulary

Year 4

angle, right-angled

base, square-based

size

bigger, larger, smaller

symmetry, symmetrical, symmetrical pattern

line symmetry

reflect, reflection

pattern, repeating pattern

match

regular, irregular

2-D shape

2-D, two-dimensional

corner, side

point, pointed

rectangle (including square), rectangular,
oblong

rectilinear

circle, circular

triangle, triangular

equilateral triangle, isosceles triangle,
scalene triangle

pentagon, pentagonal

hexagon, hexagonal

heptagon

octagon, octagonal

quadrilateral

parallelogram, rhombus, trapezium

polygon

right-angled

parallel, perpendicular

3-D shape

3-D, three-dimensional

face, edge, vertex, vertices

cube, cuboid

pyramid

sphere, hemisphere, spherical

cone

cylinder, cylindrical

prism, triangular prism

tetrahedron, polyhedron

Position and direction

position

over, under, underneath

above, below

top, bottom, side

on, in

outside, inside

around

in front, behind

front, back

beside, next to

opposite

apart

between

middle, edge

centre

corner

direction

journey, route

left, right

up, down

higher, lower

forwards, backwards, sideways

across

next to, close, near, far

along

through

to, from, towards, away from

clockwise, anticlockwise

compass point

north, south, east, west, N, S, E, W

north-east, north-west, south-east,
south-west, NE, NW, SE, SW

horizontal, vertical, diagonal

translate, translation

Vocabulary

Year 4

movement
slide
roll
turn
stretch, bend
whole turn, half turn, quarter turn,
three-quarter turn
rotate, rotation
angle, is a greater/smaller angle than
degree
right angle
acute angle
obtuse angle
reflection
straight line
ruler, set square
angle measurer, compass

STATISTICS

count, tally, sort, vote
survey, questionnaire, data
graph, block graph, pictogram
represent
group, set
list, table, chart, bar chart, frequency table
Carroll diagram, Venn diagram
label, title, axis, axes
diagram
most popular, most common
least popular, least common

GENERAL

pattern
puzzle
problem, problem solving
mental, mentally
what could we try next?
how did you work it out?

show how you ...
explain your thinking
explain your method
describe the pattern
describe the rule
investigate
recognise
describe
draw
compare
sort
greatest value, least value
mental calculation
written calculation
statement
justify
make a statement



Vocabulary

Year 5

NUMBER

Number and place value

Number

number

numeral

zero

one, two, three ... twenty

teens numbers, eleven, twelve ... twenty

twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, hundred thousand, million

none

how many ...?

count, count (up) to, count on (from, to), count back (from, to)

forwards

backwards

count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds, thousands

equal to

equivalent to

is the same as

more, less

most, least

tally

many

odd, even

multiple of, factor of

factor pair

sequence

continue

predict

few

pattern

pair, rule

relationship

next, consecutive

> greater than

< less than

≥ greater than or equal to

≤ less than or equal to

Roman numerals

integer, positive, negative

above/below zero, minus

negative numbers

formula

divisibility

square number

prime number

ascending/descending order

Place value

ones

tens, hundreds

digit

one-, two- or three-digit number

place, place value

stands for, represents

exchange

the same number as, as many as

more, larger, bigger, greater

fewer, smaller, less

fewest, smallest, least

most, biggest, largest, greatest

one more, ten more, one hundred more, one thousand more

one less, ten less, one hundred less, one thousand less

equal to

compare

order

size

first, second, third ... twentieth

twenty-first, twenty-second ...

last, last but one

Vocabulary

Year 5

before, after
next
between
halfway between
above, below

Estimating

guess
how many ...?
estimate
nearly
roughly
close to
approximate, approximately
about the same as
just over, just under
exact, exactly
too many, too few
enough, not enough
round, nearest, round to the nearest ten,
hundred, thousand, **ten thousand**
round up, round down

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
one more, two more ... ten more ... one
hundred more
how many more to make ...?
how many more is ... than ...?
how much more is ...?
subtract
take away
how many are left/left over?

how many have gone?
one less, two less, ten less ... one hundred
less
how many fewer is ... than ...?
how much less is ...?
difference between
equals
is the same as
number bonds/pairs/facts
missing number
tens boundary, hundreds boundary, **ones
boundary, tenths boundary**
inverse

Multiplication and division

multiplication
multiply
multiplied by
multiple, factor
groups of
times
product
once, twice, three times ... ten times
repeated addition
division
dividing, divide, divided by, divided into
left, left over, remainder
grouping
sharing, share, share equally
one each, two each, three each ... ten each
group in pairs, threes ... tens
equal groups of
doubling
halving
array
row, column
number patterns
multiplication table
multiplication fact, division fact

Vocabulary

Year 5

inverse
square, squared
cube, cubed

Fractions (including decimals and percentages)

fraction, **proper/improper fraction**
equivalent fraction
mixed number
numerator, denominator
equivalent, reduced to, cancel
equal part
equal grouping
equal sharing
parts of a whole
half, two halves
one of two equal parts
quarter, two quarters, three quarters
one of four equal parts
one third, two thirds
one of three equal parts
sixths, sevenths, eighths, tenths ...
hundredths, **thousandths**
decimal, decimal fraction, decimal point,
decimal place, decimal equivalent
proportion, **in every, for every**
percentage, per cent, %

MEASUREMENT

measure
measurement
size
compare
unit, standard unit
metric unit, **imperial unit**
measuring scale, division
guess, estimate
enough, not enough
too much, too little

too many, too few
nearly, close to, about the same as,
approximately
roughly
just over, just under

Length

millimetre, centimetre, metre, kilometre, mile
length, height, width, depth, breadth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so on
far, further, furthest, near, close
distance apart ... between ... to ... from
edge, perimeter
area, covers
square centimetre (cm²), **square metre (m²),
square millimetre (mm²)**
ruler
metre stick, tape measure

Weight

mass: big, bigger, small, smaller
weight: heavy/light, heavier/lighter, heaviest/
lightest
kilogram, half kilogram, gram
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre, millilitre
capacity

Vocabulary

Year 5

volume
full
empty
more than
less than
half full
quarter full
holds, contains
container, measuring cylinder
pint, gallon

Temperature

temperature
degree
centigrade

Time

time
days of the week, Monday, Tuesday ...
months of the year (January, February ...)
seasons: spring, summer, autumn, winter
day, week, weekend, fortnight, month, year,
leap year, century, millennium
birthday, holiday
morning, afternoon, evening, night
bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
noon, midnight
calendar, date, date of birth
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
how long ago?

how long will it be to ...?
how long will it take to ...?
how often?
always, never, often, sometimes
usually
once, twice
hour, o'clock, half past, quarter past,
quarter to
5, 10, 15 ... minutes past
a.m., p.m.
clock, clock face, watch, hands
digital/analogue clock/watch, timer
hour hand, minute hand
hours, minutes, seconds
timetable, arrive, depart
Roman numerals
12-hour clock time, 24-hour clock time

Money

money
coin
penny, pence, pound
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much ...?
how many ...?
total
discount
currency

GEOMETRY

Properties of shape

shape, pattern



Vocabulary

Year 5

flat, line
curved, straight
round
hollow, solid
sort
make, build, construct, draw, sketch
perimeter
centre, **radius, diameter**
surface
angle, right-angled
congruent
base, square-based
size
bigger, larger, smaller
symmetry, symmetrical, symmetrical pattern
line symmetry
reflect, reflection
axis of symmetry, reflective symmetry
pattern, repeating pattern
match
regular, irregular

2-D shape

2-D, two-dimensional
corner, side
point, pointed
rectangle (including square), rectangular, oblong
rectilinear
circle, circular
triangle, triangular
equilateral triangle, isosceles triangle, scalene triangle
pentagon, pentagonal
hexagon, hexagonal
heptagon
octagon, octagonal
quadrilateral
parallelogram, rhombus, trapezium

polygon
right -angled
parallel, perpendicular
x-axis, y-axis, quadrant

3-D shape

3-D, three-dimensional
face, edge, vertex, vertices
cube, cuboid
pyramid
sphere, hemisphere, spherical
cone
cylinder, cylindrical
prism, triangular prism
tetrahedron, polyhedron
octahedron

Position and direction

position
over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey, route
left, right
up, down

Vocabulary

Year 5

higher, lower
forwards, backwards, sideways
across
next to, close, near, far
along
through
to, from, towards, away from
clockwise, anticlockwise
compass point
north, south, east, west, N, S, E, W
north-east, north-west, south-east,
south-west, NE, NW, SE, SW
horizontal, vertical, diagonal
translate, translation
coordinate
movement
slide
roll
turn
stretch, bend
whole turn, half turn, quarter turn,
three-quarter turn
rotate, rotation
angle, is a greater/smaller angle than
degree
right angle
acute angle
obtuse angle
reflection
straight line
ruler, set square
angle measurer, compass, **protractor**

STATISTICS

count, tally, sort, vote
survey, questionnaire, data, **database**
graph, block graph, pictogram
represent
group, set

list, table, chart, bar chart, frequency table,
bar line chart
Carroll diagram, Venn diagram
line graph
label, title, axis, axes
diagram
most popular, most common
least popular, least common
maximum/minimum value
outcome

GENERAL

pattern
puzzle
problem, problem solving
mental, mentally
what could we try next?
how did you work it out?
show how you ...
explain your thinking
explain your method
describe the pattern
describe the rule
investigate
recognise
describe
draw
compare
sort
greatest value, least value
mental calculation
written calculation
statement
justify
make a statement
explain your reasoning



Vocabulary

Year 6

NUMBER

Number and place value

Number

number

numeral

zero

one, two, three ... twenty

teens numbers, eleven, twelve ... twenty

twenty-one, twenty-two ... one hundred, two

hundred ... one thousand ... ten thousand,
hundred thousand, million

none

how many ...?

count, count (up) to, count on (from, to),
count back (from, to)

forwards

backwards

count in ones, twos, fives, tens, threes,
fours, eights, fifties, sixes, sevens, nines,
twenty-fives and so on to hundreds,
thousands

equal to

equivalent to

is the same as

more, less

most, least

tally

many

odd, even

multiple of, factor of

factor pair

sequence

continue

predict

few

pattern

pair, rule

relationship

next, consecutive

> greater than

< less than

≥ greater than or equal to

≤ less than or equal to

Roman numerals

integer, positive, negative

above/below zero, minus

negative numbers

formula

divisibility

square number

prime number

factorise

prime factor

ascending/descending order

digit total

Place value

ones

tens, hundreds

digit

one-, two- or three-digit number

place, place value

stands for, represents

exchange

the same number as, as many as

more, larger, bigger, greater

fewer, smaller, less

fewest, smallest, least

most, biggest, largest, greatest

one more, ten more, one hundred more, one
thousand more

one less, ten less, one hundred less, one
thousand less

equal to

compare

order

size

first, second, third ... twentieth

twenty-first, twenty-second ...

last, last but one

before, after

next

between



Vocabulary

Year 6

halfway between
above, below

Estimating

guess
how many ...?
estimate
nearly
roughly
close to
approximate, approximately
about the same as
just over, just under
exact, exactly
too many, too few
enough, not enough
round, nearest, round to the nearest ten,
hundred, thousand, ten thousand
round up, round down

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
one more, two more ... ten more ... one
hundred more
how many more to make ...?
how many more is ... than ...?
how much more is ...?
subtract
take away
how many are left/left over?
how many have gone?
one less, two less, ten less ... one hundred
less
how many fewer is ... than ...?
how much less is ...?

difference between
equals
is the same as
number bonds/pairs/facts
missing number
tens boundary, hundreds boundary, ones
boundary, tenths boundary
inverse

Multiplication and division

multiplication
multiply
multiplied by
multiple, factor
groups of
times
product
once, twice, three times ... ten times
repeated addition
division
dividing, divide, divided by, divided into
left, left over, remainder
grouping
sharing, share, share equally
one each, two each, three each ... ten each
group in pairs, threes ... tens
equal groups of
doubling
halving
array
row, column
number patterns
multiplication table
multiplication fact, division fact
inverse
square, squared
cube, cubed

Fractions (including decimals, percentages, ratio and proportion)

fraction, proper/improper fraction

Vocabulary

Year 6

equivalent fraction
mixed number
numerator, denominator
equivalent, reduced to, cancel
equal part
equal grouping
equal sharing
parts of a whole
half, two halves
one of two equal parts
quarter, two quarters, three quarters
one of four equal parts
one third, two thirds
one of three equal parts
sixths, sevenths, eighths, tenths ...
hundredths, thousandths
decimal, decimal fraction, decimal point,
decimal place, decimal equivalent
proportion, in every, for every
ratio
percentage, per cent, %

Algebra

formula, **formulae**
equation
unknown
variable

MEASUREMENT

measure
measurement
size
compare
unit, standard unit
metric unit, imperial unit
measuring scale, division
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as,

approximately
roughly
just over, just under

Length

centimetre, metre, millimetre, kilometre,
mile, **yard, foot, feet, inch, inches**
length, height, width, depth, breadth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so
on
far, further, furthest, near, close
distance apart ... between ... to ... from
edge, perimeter, **circumference**
area, covers
square centimetre (cm²), square metre (m²),
square millimetre (mm²)
ruler
metre stick, tape measure

Weight

mass: big, bigger, small, smaller
weight: heavy/light, heavier/lighter, heaviest/
lightest
tonne, kilogram, half kilogram, gram, **pound**,
ounce
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre, millilitre, **centilitre**
**cubic centimetres (cm³), cubic metres (m³),
cubic millimetres (mm³), cubic kilometres
(km³)**
capacity
volume

Vocabulary

Year 6

full
empty
more than
less than
half full
quarter full
holds, contains
container, measuring cylinder
pint, gallon

Temperature

temperature
degree
centigrade

Time

time
days of the week, Monday, Tuesday ...
months of the year (January, February ...)
seasons: spring, summer, autumn, winter
day, week, weekend, fortnight, month, year,
leap year, century, millennium
birthday, holiday
morning, afternoon, evening, night
bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
noon, midnight
calendar, date, date of birth
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
how long ago?
how long will it be to ...?
how long will it take to ...?

how often?
always, never, often, sometimes
usually
once, twice
hour, o'clock, half past, quarter past,
quarter to
5, 10, 15 ... minutes past
a.m., p.m.
clock, clock face, watch, hands
digital/analogue clock/watch, timer
hour hand, minute hand
hours, minutes, seconds
timetable, arrive, depart
Roman numerals
12-hour clock time, 24-hour clock time
**Greenwich Mean Time, British Summer
Time, International Date Line**

Money

money
coin
penny, pence, pound
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much ...?
how many ...?
total
discount
currency
profit, loss

GEOMETRY

Properties of shape

shape, pattern
flat, line

Vocabulary

Year 6

curved, straight
round
hollow, solid
sort
make, build, construct, draw, sketch
perimeter
centre, radius, diameter
circumference, concentric, arc
net, open, closed
surface
angle, right-angled
congruent
intersecting, intersection
plane
base, square-based
size
bigger, larger, smaller
symmetry, symmetrical, symmetrical pattern
line symmetry
reflect, reflection
axis of symmetry, reflective symmetry
pattern, repeating pattern
match
regular, irregular

2-D shape

2-D, two-dimensional
corner, side
point, pointed
rectangle (including square), rectangular, oblong
rectilinear
circle, circular
triangle, triangular
equilateral triangle, isosceles triangle, scalene triangle
pentagon, pentagonal
hexagon, hexagonal
heptagon
octagon, octagonal
quadrilateral

parallelogram, rhombus, trapezium, kite
polygon
right-angled
parallel, perpendicular
x-axis, y-axis, quadrant

3-D shape

3-D, three-dimensional
face, edge, vertex, vertices
cube, cuboid
pyramid
sphere, hemisphere, spherical
cone
cylinder, cylindrical
prism, triangular prism
tetrahedron, polyhedron
octahedron
dodecahedron
net, open, closed

Position and direction

position
over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey, route
left, right
up, down

Vocabulary

Year 6

higher, lower
forwards, backwards, sideways
across
next to, close, near, far
along
through
to, from, towards, away from
clockwise, anticlockwise
compass point
north, south, east, west, N, S, E, W
north-east, north-west, south-east,
south-west, NE, NW, SE, SW
horizontal, vertical, diagonal
translate, translation
coordinate
movement
slide
roll
turn
stretch, bend
whole turn, half turn, quarter turn,
three-quarter turn
rotate, rotation
angle, is a greater/smaller angle than
degree
right angle
acute angle
obtuse angle
reflex angle
reflection
straight line
ruler, set square
angle measurer, compass, protractor

STATISTICS

count, tally, sort, vote
survey, questionnaire, data, database
graph, block graph, pictogram
represent
group, set

list, table, chart, bar chart, frequency table,
bar line chart

Carroll diagram, Venn diagram

line graph

pie chart

label, title, axis, axes

diagram

most popular, most common

least popular, least common

maximum/minimum value

outcome

**mean (mode, median, range as estimates
for this)**

statistics, distribution

GENERAL

pattern

puzzle

problem, problem solving

mental, mentally

what could we try next?

how did you work it out?

show how you ...

explain your thinking

explain your method

describe the pattern

describe the rule

investigate

recognise

describe

draw

compare

sort

greatest value, least value

mental calculation

written calculation

statement

justify

make a statement

explain your reasoning