

Teaching Long Division

Worksheets for 1-digit division, 2-digit division & listing multiples.

KS2

Teaching Long Division - Contents

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Using this long division method to divide by 1-digit numbers

A good place to begin after you have taught your class the long division method discussed in the accompanying blog on Third Space Learning is with 1-digit numbers.

By starting here, you are giving pupils the chance to see that 'long-division' is simply just a different way of setting out what they know as 'short-division'.

From here you can then go on to dividing 2-digit numbers.

How to use the worksheet below

1. Print out the worksheet, with 1 sheet covering every 2 pupils/groups.
2. Cut the worksheet in half (the questions are on there twice to save paper).
3. Hand the sheets out to your class, and get them to work through the questions in their maths books.
4. Watch them solve the problems using the method they have just learned!
5. Either hand out the answer sheet provided, or go through the answers on the whiteboard, opening them up to discussion.

Dividing by 1-digit numbers



Success criteria

1. Divide
2. Multiply
3. Subtract
4. Bring it down...
5. ... and bring it on back!

$$\begin{array}{r}
 324 \\
 2 \overline{)648} \\
 \underline{-6} \\
 04 \\
 \underline{-4} \\
 08 \\
 \underline{-8} \\
 0
 \end{array}$$

	A		B		C
1)	$626 \div 2 =$	1)	$1,572 \div 3 =$	1)	$2,580 \div 4 =$
2)	$734 \div 2 =$	2)	$1,016 \div 4 =$	2)	$2,790 \div 6 =$
3)	$702 \div 3 =$	3)	$3,740 \div 5 =$	3)	$2,975 \div 7 =$
4)	$568 \div 4 =$	4)	$1,944 \div 6 =$	4)	$5,400 \div 8 =$
5)	$1,775 \div 5 =$	5)	$2,889 \div 9 =$	5)	$6,183 \div 9 =$

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5)	$1,775 \div 5 =$	5)	$2,889 \div 9 =$	5)	$6,183 \div 9 =$

Dividing by 1-digit numbers -

The answers

A

1) $626 \div 2 = 313$

2) $734 \div 2 = 367$

3) $702 \div 3 = 234$

4) $568 \div 4 = 142$

5) $1,775 \div 5 = 355$

B

1) $1,572 \div 3 = 524$

2) $1,016 \div 4 = 254$

3) $3,740 \div 5 = 748$

4) $1,944 \div 6 = 324$

5) $2,889 \div 9 = 321$

C

1) $2,580 \div 4 = 645$

2) $2,790 \div 6 = 465$

3) $2,975 \div 7 = 425$

4) $5,400 \div 8 = 675$

5) $6,183 \div 9 = 687$

Using this long division method to divide by 2-digit numbers

Dividing by 2-digit numbers can be a cause of panic for many primary pupils, but using the method discussed in the Third Space Learning blog that goes alongside this resource should result in a calm classroom.

The method makes the process of long division a very systematic one, which is something that the majority of KS2 pupils like, and it can be a fantastic way to teach your class about the often dreaded 'long division'.

How to use the worksheet below

1. Print out the worksheet, with 1 sheet covering every 2 pupils/groups.
2. Cut the worksheet in half (the questions are on there twice to save paper).
3. Hand the sheets out to your class, and get them to work through the questions in their maths books.
4. Watch them solve the problems using the method they have just learned!
5. Either hand out the answer sheet provided, or go through the answers on the whiteboard, opening them up to discussion.

Dividing by 2-digit numbers



Success criteria

1. List multiples of the divisor (are you going to do repeated addition or partition and add?)
2. Divide
3. Multiply
4. Subtract
5. Bring it down...
6. ... and bring it on back!

1 - 24	24		13032	00543
2 - 48				- 120
3 - 72				103
4 - 96				- 96
5 - 120				72
6 - 144				- 72
7 - 168				00
8 - 192				
9 - 216				

	A	B	C
1)	$2,574 \div 11 =$	1) $4,096 \div 16 =$	1) $13,528 \div 38 =$
2)	$1,476 \div 12 =$	2) $4,488 \div 17 =$	2) $18,473 \div 49 =$
3)	$2,982 \div 21 =$	3) $2,628 \div 18 =$	3) $28,324 \div 97 =$
4)	$7,062 \div 22 =$	4) $6,764 \div 19 =$	4) $10,147 \div 73 =$
5)	$6,165 \div 15 =$	5) $12,350 \div 26 =$	5) $46,182 \div 86 =$

Dividing by 2-digit numbers



Success criteria

1. List multiples of the divisor (are you going to do repeated addition or partition and add?)
2. Divide
3. Multiply
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5. Bring it down...
6. ... and bring it on back!

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7 - 168				00
8 - 192				
9 - 216				

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5)	$6,165 \div 15 =$	5) $12,350 \div 26 =$	5) $46,182 \div 86 =$

Dividing by 2-digit numbers -

The answers

A

1) $2,574 \div 11 = 234$

2) $1,476 \div 12 = 123$

3) $2,982 \div 21 = 142$

4) $7,062 \div 22 = 321$

5) $6,165 \div 15 = 411$

B

1) $4,096 \div 16 = 256$

2) $4,488 \div 17 = 264$

3) $2,628 \div 18 = 146$

4) $6,764 \div 19 = 356$

5) $12,350 \div 26 = 475$

C

1) $13,528 \div 38 = 356$

2) $18,473 \div 49 = 377$

3) $28,324 \div 97 = 292$

4) $10,147 \div 73 = 139$

5) $46,182 \div 86 = 537$

Listing multiples to help solve long division problems

A key part of this long division method is getting pupils to list out the multiples of the divisor. Once pupils have written out all of the multiples of the number in question (up to 9), they will then be able to work out long division questions in a much more systematic manner.

How to use the worksheet below

1. Print out the worksheet, with 1 sheet covering every 3 pupils/groups.
2. Cut the worksheet in thirds (the questions are on there three times to save paper).
3. Hand the sheets out to your class, and get them to work through the questions in their maths books.
4. Watch them solve the problems using the method they have just learned!
5. Either hand out the answer sheet provided, or go through the answers on the whiteboard, opening them up to discussion.

Listing multiples of 2 digit numbers

List the multiples of 24

Partitioning	Repeated addition
$20 + 4 = 24$	24
$40 + 8 = 48$	$\begin{array}{r} +24 \\ 48 \end{array}$
$60 + 12 = 72$	$\begin{array}{r} +24 \\ 72 \end{array}$
$80 + 16 = 96$	$\begin{array}{r} +24 \\ 96 \end{array}$
$100 + 20 = 120$	$\begin{array}{r} +24 \\ 120 \end{array}$

List 9 multiples of each number

- A
1) 13 2) 14 3) 21 4) 22 5) 23
- B
1) 24 2) 43 3) 34 4) 54 5) 63
- C
1) 46 2) 74 3) 69 4) 56 5) 49

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List 9 multiples of each number

- A
1) 13 2) 14 3) 21 4) 22 5) 23
- B
1) 24 2) 43 3) 34 4) 54 5) 63
- C
1) 46 2) 74 3) 69 4) 56 5) 49

Listing multiples of 2 digit numbers -

The answers

A

- 1) 13, 26, 39, 52, 65, 78, 91, 104, 117
- 2) 14, 28, 42, 56, 70, 84, 98, 112, 126
- 3) 21, 42, 63, 84, 105, 126, 147, 168, 189
- 4) 22, 44, 66, 88, 110, 132, 154, 176, 198
- 5) 23, 46, 69, 92, 115, 138, 161, 184, 207

B

- 1) 24, 48, 72, 96, 120, 144, 168, 192, 216
- 2) 43, 86, 129, 172, 215, 258, 301, 344, 387
- 3) 34, 68, 102, 136, 170, 204, 238, 272, 306
- 4) 54, 108, 162, 216, 270, 324, 378, 432, 486
- 5) 63, 126, 189, 252, 315, 378, 441, 504, 567

C


- 1) 46, 92, 138, 184, 230, 276, 322, 368, 414
- 2) 74, 148, 222, 296, 370, 444, 518, 592, 666
- 3) 69, 138, 207, 276, 345, 414, 483, 552, 621
- 4) 56, 112, 168, 224, 280, 336, 392, 448, 504
- 5) 49, 98, 147, 196, 245, 294, 343, 392, 441


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