

Teaching Long Division

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

Grades 3-5

Teaching Long Division



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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 students 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 students/groups.
- 2 Cut the worksheet in half (the questions are on there twice to save paper).
- Hand the sheets out to your class, and get them to work through the questions in their notebooks.
- Watch them solve the problems using the method they have just learned!
- 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

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

648

Group 1

a)
$$626 \div 2 =$$

b)
$$734 \div 2 =$$

c)
$$702 \div 3 =$$

d)
$$568 \div 4 =$$

Group 2

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

b)
$$1,016 \div 4 =$$

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

d)
$$1,944 \div 6 =$$

e)
$$2,889 \div 9 =$$

Group 3

a)
$$2,580 \div 4 =$$

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

c)
$$2,975 \div 7 =$$

d)
$$5,400 \div 8 =$$

e)
$$6,183 \div 9 =$$

Dividing by 1-digit numbers

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



Group 1

- a) $626 \div 2 =$
- b) $734 \div 2 =$
- c) $702 \div 3 =$
- d) $568 \div 4 =$
- e) $1,775 \div 5 =$

Group 2

- a) $1,572 \div 3 =$
- b) $1,016 \div 4 =$
- c) $3,740 \div 5 =$
- d) $1,944 \div 6 =$
- e) $2,889 \div 9 =$

Group 3

- a) $2,580 \div 4 =$
- b) $2,790 \div 6 =$
- c) $2,975 \div 7 =$
- d) $5,400 \div 8 =$
- e) $6,183 \div 9 =$



Dividing by 1-digit numbers

The answers

Group	Question	Answer
	a) 626 ÷ 2 =	a) 313
	b) 734 ÷ 2 =	b) 367
Group 1	c) 702 ÷ 3 =	c) 234
	d) 568 ÷ 4 =	d) 142
	e) 1,775 ÷ 5 =	e) 355
	a) 1,572 ÷ 3 =	a) 524
	b) 1,016 ÷ 4 =	b) 254
Group 2	c) 3,740 ÷ 5 =	c) 748
	d) 1,944 ÷ 6 =	d) 324
	e) 2,889 ÷ 9 =	e) 321
Group 3	a) 2,580 ÷ 4 =	a) 645
	b) 2,790 ÷ 6 =	b) 465
	c) 2,975 ÷ 7 =	c) 425
	d) 5,400 ÷ 8 =	d) 675
	e) 6,183 ÷ 9 =	e) 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 calmer 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

- 1 Print out the worksheet, with 1 sheet covering every 2 pupils/groups
- 2 Cut the worksheet in half (the questions are duplicated).
- Hand the sheets out to your class, and get them to work through the questions in their maths books.
- Watch them solve the problems using the method they have just learned!
- 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

- 1) List multiples of the divisor (are you going to do repeated addition or partition and add?)
- 2) Divide

X

- 3) Multiply
- 4) Subtract
- 5) Bring it down...
- 6) ... and bring it on back!

00543

24 | 13032

- 3 72
- 4 96
- 5 120
- 6 144
- -72 -00

Group 1

a)
$$2,574 \div 11 =$$

b)
$$1,476 \div 12 =$$

c)
$$2,982 \div 21 =$$

d)
$$7,062 \div 22 =$$

e)
$$6,165 \div 15 =$$

Group 2

c)
$$2,628 \div 18 =$$

d)
$$6,764 \div 19 =$$

e)
$$12,350 \div 26 =$$

Group 3

a)
$$13,528 \div 38 =$$

b)
$$18,473 \div 49 =$$

c)
$$28,324 \div 97 =$$

d)
$$10,147 \div 73 =$$

e)
$$46,182 \div 86 =$$

Dividing by 2-digit numbers

1) List multiples of the divisor (are you going to do repeated addition or partition and add?)



X

- 3) Multiply
- 4) Subtract
- 5) Bring it down...
- 6) ... and bring it on back!

24 120

00543

1-24 -120

2 - 48 3 - 72

4 - 96

5 - 120

5 - 120 6 - 144

-/2

Group 1

a)
$$2.574 \div 11 =$$

b)
$$1,476 \div 12 =$$

c)
$$2,982 \div 21 =$$

d)
$$7,062 \div 22 =$$

e)
$$6,165 \div 15 =$$

Group 2

a)
$$4,096 \div 16 =$$

b)
$$4,488 \div 17 =$$

Group 3



Dividing by 2-digit numbers

The answers

Group	Question	Answer
	a) 2,574 ÷ 11 =	a) 234
	b) 1,476 ÷ 12 =	b) 123
Group 1	c) 2,982 ÷ 21 =	c) 142
	d) 7,062 ÷ 22 =	d) 321
	e) 6,165 ÷ 15 =	e) 411
	a) 4,096 ÷ 16 =	a) 256
Group 2	b) 4,488 ÷ 17 =	b) 264
	c) 2,628 ÷ 18 =	c) 146
	d) 6,764 ÷ 19 =	d) 356
	e) 12,350 ÷ 26 =	e) 475
Group 3	a) 13,528 ÷ 38 =	a) 356
	b) 18,473 ÷ 49 =	b) 377
	c) 28,324 ÷ 97 =	c) 292
	d) 10,147 ÷ 73 =	d) 139
	e) 46,182 ÷ 86 =	e) 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

- 1 Print out the worksheet, with 1 sheet covering every 3 pupils/groups
- 2 Cut the worksheet in thirds (the questions are duplicated).
- Hand the sheets out to your class, and get them to work through the questions in their maths books.
- 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 + 24
40 + 8 = 48	48
60 + 12 = 72	+ 24 72
80 + 16 = 96	+ 24
100 + 20 = 120	96
	+ 24
	120

List 9 multiples of each number

Group 1

a) 13 b) 14 c) 21 d) 22 e) 23

Group 2

a) 24 b) 43 c) 34 d) 54 e) 63

Group 3

a) 46 b) 74 c) 69 d) 56 e) 49

Listing multiples of 2-digit numbers

List the multiples of 24

Partitioning	Repeated addition
20 + 4 = 24	24
40 + 8 = 48	+ 24 48
60 + 12 = 72	+ 24
80 + 16 = 96	72 + 24
100 + 20 = 120	96
	+ 24
	120

List 9 multiples of each number

Group 1

a) 13 b) 14 c) 21 d) 22 e) 23

Group 2

a) 24 b) 43 c) 34 d) 54 e) 63

Group 3

a) 46 b) 74 c) 69 d) 56 e) 49

Listing multiples of 2-digit numbers

List the multiples of 24

Partitioning Repeated addition 24 20 + 4 = 2424 40 + 8 = 4848 24 60 + 12 = 7272 80 + 16 = 96+ 24 96 100 + 20 = 12024 120

List 9 multiples of each number

Group 1

a) 13 b) 14 c) 21 d) 22 e) 23

Group 2

a) 24 b) 43 c) 34 d) 54 e) 63

Group 3

a) 46 b) 74 c) 69 d) 56 e) 49



Listing multiples of 2-digit numbers

The answers

Group	Question	Answer
	a) 13	a) 13, 26, 39, 52, 65, 78, 91, 104, 117
	b) 14	b) 14, 28, 42, 56, 70, 84, 98, 112, 126
Group 1	c) 21	c) 21, 42, 63, 84, 105, 126, 147, 168, 189
	d) 22	d) 22, 44, 66, 88, 110, 132, 154, 176, 198
	e) 23	e) 23, 46, 69, 92, 115, 138, 161, 184, 207
	a) 24	a) 24, 48, 72, 96, 120, 144, 168, 192, 216
	b) 43	b) 43, 86, 129, 172, 215, 258, 301, 344, 387
Group 2	c) 34	c) 34, 68, 102, 136, 170, 204, 238, 272, 306
	d) 54	d) 54, 108, 162, 216, 270, 324, 378, 432, 486
	e) 63	e) 63, 126, 189, 252, 315, 378, 441, 504, 567
	a) 46	a) 46, 92, 138, 184, 230, 276, 322, 368, 414
	b) 74	b) 74, 148, 222, 296, 370, 444, 518, 592, 666
Group 3	c) 69	c) 69, 138, 207, 276, 345, 414, 483, 552, 621
	d) 56	d) 56, 112, 168, 224, 280, 336, 392, 448, 504
	e) 49	e) 49, 98, 147, 196, 245, 294, 343, 392, 441

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