

Dividing 4-Digits by 1-Digit (With Exchanging)

To divide 4-digit numbers by 1-digit numbers



- 1) Colour each division to match with the correct answer. Use different colours for each question.
Use your Place Value Grid to help you if you need to.

9	9	8	1	

5	3	1	5	5

5	4	0	6	5

5	4	9	8	5

2	1	1	3	8

2	1	1	0	6

7	5	6	0	7

3	9	3	6	

3	9	4	2	

312	553
997	109
569	131
813	801
631	314

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- 1) Colour each division to match with the correct answer. Use different colours for each question.
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2	1	8	1	6

4	1	4	4	8

5	2	1	3	5

8	3	3	2	0

4	9	8	4	

4	1	0	8	8

6	5	4	3	0

5	4	0	6	5

3	2	0	0	1

206	427
667	908
341	813
246	362
272	415
905	651

Dividing 4-Digits by 1-Digit (With Exchanging)

2) Use the answers remaining from question 1 to write your own 4 digit division questions which give the number as an answer.

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Hint: Use the inverse to help you!

3)

a) Use your knowledge of short division to help you find the missing digits in these divisions.

		8	☆	8
☆	2	☆	² 3	² 4

	1	☆	1	4
4	☆	0	☆	¹ ☆

b) Create your own division problem for a friend to solve. Make sure the dividend can be divided exactly by the divisor.

Dividing 4-Digits by 1-Digit (With Exchanging)

To divide 4-digit numbers by 1-digit numbers



- 1) Colour each division to match with the correct answer. Use different colours for each question.
Use your Place Value Grid to help you if you need to.

8	2	4	7	2

4	3	2	2	8

9	2	5	3	8

8	7	5	5	2

6	1	5	9	6

3	2	6	5	2

9	1	5	9	3

7	1	4	0	7

9	6	4	2	6

309	623
714	741
187	177
402	282
884	944
201	807
944	266

Dividing 4-Digits by 1-Digit (With Exchanging)

2) Use the answers remaining from question 1 to write your own division questions which give the number as an answer.

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Hint: Use the inverse of division to help you!

3)

a) Use your knowledge of short division to help you find the missing digits in these divisions.

	1	☆	0	☆
☆	8	³ ☆	☆	² 5

	1	1	☆	☆
☆	4	☆	¹ 6	0

	1	2	☆	0
6	☆	¹ ☆	6	☆

b) Create your own division problem for a friend to solve. Make sure the dividend can be divided exactly by the divisor.

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Dividing 4-Digits by 1-Digit (With Exchanging) Answers

To divide 4-digit numbers by 1-digit numbers



- 1) Colour each division to match with the correct answer. Use different colours for each question.
Use your Place Value Grid to help you if you need to.

	1	0	9	
9	9	8	1	

		6	3	1
5	3	1	5	5

		8	1	3
5	4	0	6	5

		9	9	7
5	4	9	8	5

		5	6	9
2	1	1	3	8

		5	5	3
2	1	1	0	6

		8	0	1
7	5	6	0	7

	3	1	2	
3	9	3	6	

	3	1	4	
3	9	4	2	

312	553
997	109
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Dividing 4-Digits by 1-Digit (With Exchanging) Answers

To divide 4-digit numbers by 1-digit numbers



- 1) Colour each division to match with the correct answer. Use different colours for each question.
Use your Place Value Grid to help you if you need to.

		9	0	8
2	1	8	1	6

		3	6	2
4	1	4	4	8

		4	2	7
5	2	1	3	5

		4	1	5
8	3	3	2	0

		2	4	6
4	9	8	4	

		2	7	2
4	1	0	8	8

		9	0	5
6	5	4	3	0

		8	1	3
5	4	0	6	5

		6	6	7
3	2	0	0	1

206	427
667	908
341	813
246	362
272	415
905	651

2) Use the answers remaining from question 1 to write your own 4 digit division questions which give the number as an answer.

Numbers: 206, 341, 651 -

Varying answers based on numbers:

e.g.

$$1236 \div 6 = 206$$

$$1705 \div 5 = 341$$

$$2604 \div 4 = 651$$

3)

a) Use your knowledge of short division to help you find the missing digits in these divisions.

		8	7	8
3	2	6	² 3	² 4

	1	0	1	4
4	4	0	5	¹ 6

b) Create your own division problem for a friend to solve. Make sure the dividend can be divided exactly by the divisor.

Varying answers

Dividing 4-Digits by 1-Digit (With Exchanging) Answers

To divide 4-digit numbers by 1-digit numbers



- 1) Colour each division to match with the correct answer. Use different colours for each question.
Use your Place Value Grid to help you if you need to.

		3	0	9
8	2	4	7	2

		8	0	7
4	3	2	2	8

		2	8	2
9	2	5	3	8

		9	4	4
8	7	5	5	2

		2	6	6
6	1	5	9	6

		8	8	4
3	2	6	5	2

		1	7	7
9	1	5	9	3

		2	0	1
7	1	4	0	7

		7	1	4
9	6	4	2	6

309	623
714	741
187	177
402	282
884	944
201	807
944	266

2) Use the answers remaining from question 1 to write your own division questions which give the number as an answer.

Numbers: 623, 187, 402, 741 -

Varying answers based on numbers:

e.g.

$$3115 \div 5 = 623$$

$$1496 \div 8 = 187$$

$$2412 \div 6 = 402$$

$$5928 \div 8 = 741$$

3)

a) Use your knowledge of short division to help you find the missing digits in these divisions.

$$8525 \div 5 = 1705$$

	1	7	0	5
5	8	³ 5	² 2	5

$$4560 \div 4 = 1140$$

	1	1	4	0
4	4	5	¹ 6	0

$$7260 \div 6 = 1210$$

	1	2	1	0
6	7	¹ 2	6	0

b) Create your own division problem for a friend to solve. Make sure the dividend can be divided exactly by the divisor.

Varying answers



1)

a) 7458

b) $7458 \div 6 = 1243$

	1	2	4	3
6	7	¹ 4	² 5	¹ 8

c) Yes. $7458 \div 3 = 2486$.
This is because 3 is a factor of 6.
7458 is a multiple of 3 and 6.

	2	4	8	6
3	7	¹ 4	² 5	¹ 8

2) $7329 \div 7 = 1047$

$9240 \div 4 = 2310$

$6345 \div 5 = 1269$

$8244 \div 9 = 916$


3)


a) False. $4616 \div 4 = 1154$


b) True.

c) False. $9849 \div 7 = 1407$

1) Yes, because

 = 1403

 = 458

 = 166

2) He is incorrect.

$5264 \div 4 = 1316$ and $1316 < 1721$

He is incorrect.

$9123 \div 3 = 3041$ and $2901 < 3041$

3) She was incorrect because she forgot to exchange the remaining 1000 for 10 hundreds. This is then divisible by 2, which is 500.

Divided correctly, $5068 \div 2 = 2534$

She was incorrect because she has forgotten to exchange remainders in each column.



1) Varying answers, including:

$1023 \div 3 = 341$

$1032 \div 3 = 344$

$3021 \div 3 = 1007$

$3003 \div 3 = 1001$

$3030 \div 3 = 1010$

$6000 \div 3 = 2000$

2) Varying answers including:

$8745 \div 5 = 1749$

3)

a) $6345 \div 5 = 1269$

b) Yes, it is also divisible by 3 and 9:

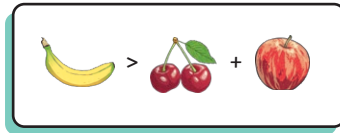
$6345 \div 3 = 2115$

$6345 \div 9 = 705$





1) Is this statement true? Prove it.



8418					

3206						

996					

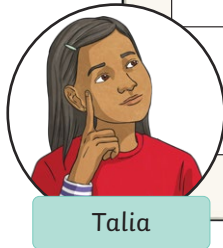
2) Leo has written some comparison statements. Is he correct? Prove it.

5264 ÷ 4 > 1721
 2901 > 9123 ÷ 3



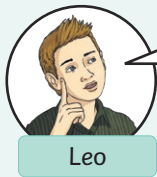
3) Talia has completed her homework, but she has made some mistakes. Explain the mistakes and calculate the correct answers.

		2	0	3	4		X
	2	5	0	6	8		
			2	0	1		X
	5	1	3	4	5		





- 1) Noah has 6 counters. He uses a place value grid to create division questions. Use the clues to find out which calculations he could make.



The hundreds column has no counters.
The number is exactly divisible by 3.

1000s	100s	10s	1s

- 2) Choose your own digits to complete this calculation. Can you show five different ways?

5	8			5

- 3) a) Use your knowledge of short division to help you find the missing digits in this division.
b) Use the dividend you have just found and investigate if it is divisible by any other numbers. Is there more than one answer?

	1	2	★	★
★	6	1★	3 4	4 5

1)



- a) Identify the number represented in the place value chart.
- b) Divide the number by 6, using the written method of short division and exchanging if necessary. Use the place value chart to circle the groups of 6 to help you.
- c) Can you divide the number shown in the place value table by 3, too? Prove it. Why do you think this is?

1000s	100s	10s	1s
7	2	3	9

2) Complete the following divisions using the formal method. Use a place value chart to help.

7	7	3	2	9

4	9	2	4	0

5	6	3	4	5

9	8	2	4	4

3) True or false? Use place value counters to help you.

- a) $4616 \div 4 = 1213$
- b) $7707 \div 3 = 2569$
- c) $9849 \div 7 = 1432$

1000s	100s	10s	1s

1)



- a) Identify the number represented in the place value chart.
- b) Divide the number by 6, using the written method of short division and exchanging if necessary. Use the place value chart to circle the groups of 6 to help you.
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1000s	100s	10s	1s
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2) Complete the following divisions using the formal method. Use a place value chart to help.

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4	9	2	4	0

5	6	3	4	5

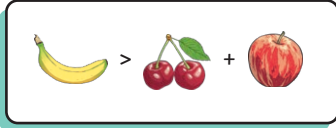
9	8	2	4	4

3) True or false? Use place value counters to help you.

- a) $4616 \div 4 = 1213$
- b) $7707 \div 3 = 2569$
- c) $9849 \div 7 = 1432$

1000s	100s	10s	1s

1) Is this statement true? Prove it.



8418

3206

996

2) Leo has written some comparison statements. Is he correct? Prove it.



Leo

$5264 \div 4 > 1721$
 $2901 > 9123 \div 3$

3) Talia has completed her homework, but she has made some mistakes. Explain the mistakes and calculate the correct answers.

		2	0	3	4	✗
	2	5	0	6	8	
			2	0	1	✗
	5	1	3	4	5	



Talia

1) Is this statement true? Prove it.



8418

3206

996

2) Leo has written some comparison statements. Is he correct? Prove it.



Leo

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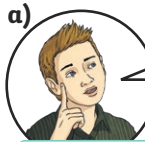
3) Talia has completed her homework, but she has made some mistakes. Explain the mistakes and calculate the correct answers.

		2	0	3	4	✗
	2	5	0	6	8	
			2	0	1	✗
	5	1	3	4	5	



Talia

- 1) Noah has 6 counters. He uses a place value grid to create division questions. Use the clues to find out which calculations he could make.



Leo

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The number is exactly divisible by 3.

1000s	100s	10s	1s

- 2) Choose your own digits to complete this calculation. Can you show five different ways?

5	8			5

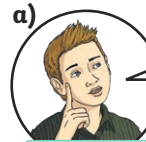
3)

- a) Use your knowledge of short division to help you find the missing digits in this division.

	1	2	★	★
★	6	¹ ★	³ 4	⁴ 5

- b) Use the dividend you have just found and investigate if it is divisible by any other numbers. Is there more than one answer?

- 1) Noah has 6 counters. He uses a place value grid to create division questions. Use the clues to find out which calculations he could make.



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3)

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	1	2	★	★
★	6	¹ ★	³ 4	⁴ 5

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