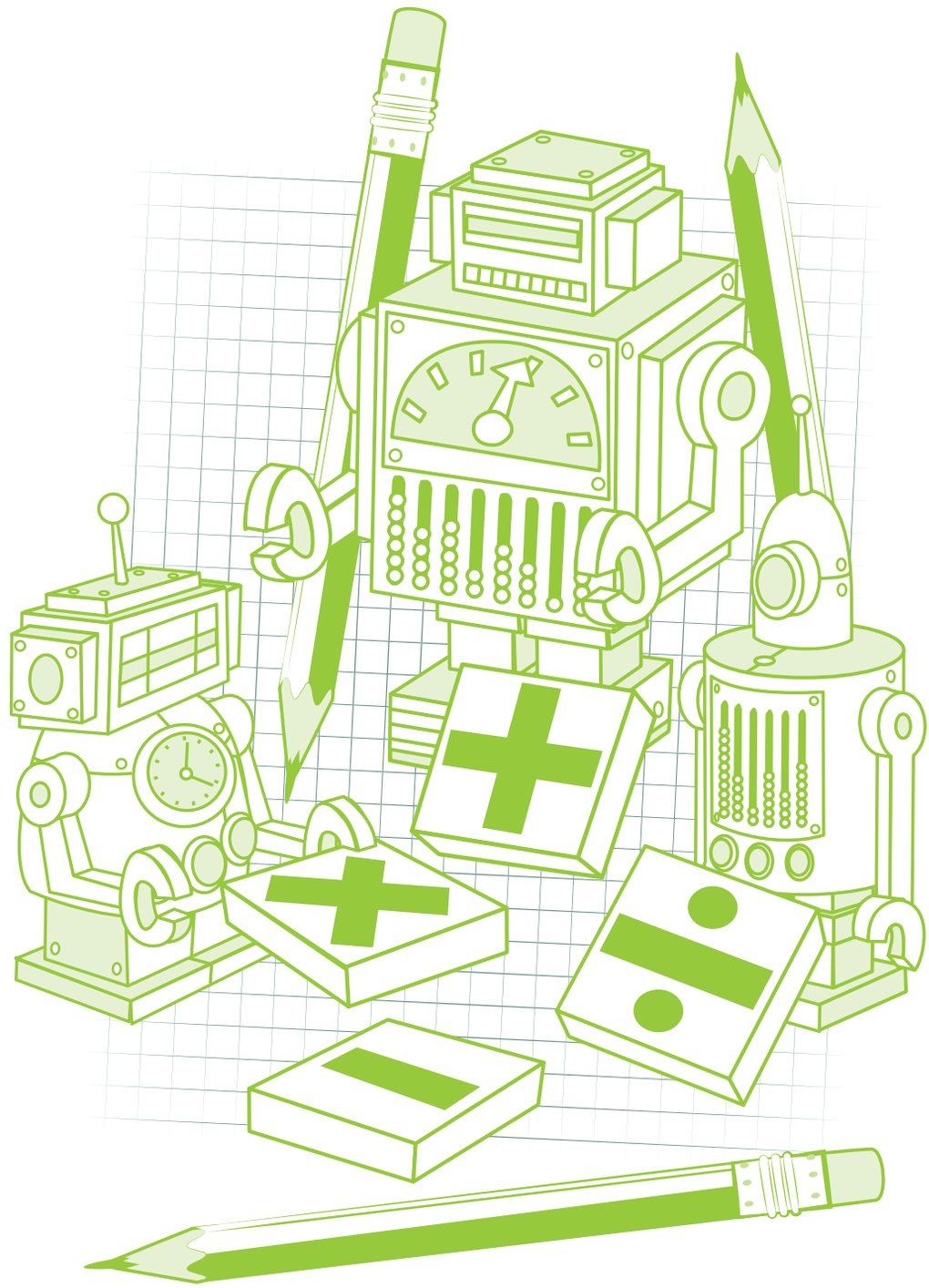
Key Stage **2**

Schofield&Sims

Written Calculation

Multiplication 1 Answers



Step 1: Two-digit × one-digit no carrying

When learning to do written multiplication, it helps to work from right to left. Start with the units. To multiply 23 by 3, start by doing 3 × 3 first. Remember that zero multiplied by any number is zero.

	T	U
	2	3
×		3

What to do

23 × 3 = ?

	T	U
	2	3
×		3
		9

1 Multiply the units digit of the top number by the bottom number. 3 × 3 = 9. Write the answer in the units column.

	T	U
	2	3
×		3
	6	9

2 Now, multiply the tens digit of the top number by the bottom number. 2 tens × 3 = 6 tens. Write the answer in the tens column.

3 Check that the answer looks about right. *Three lots of 20 is 60, so three lots of 23 is a bit more than 60. The answer 69 seems about right.*

Now you try

1

	T	U
	1	2
×		4
	4	8

2

	T	U
	3	1
×		3
	9	3

3

	T	U
	2	2
×		3
	6	6

4

	T	U
	2	1
×		4
	8	4

5

	T	U
	1	2
×		3
	3	6

6

	T	U
	2	2
×		4
	8	8

7

	T	U
	3	4
×		2
	6	8

8

	T	U
	2	0
×		3
	6	0

More practice

9

	2	3
×		2
	4	6

10

	3	3
×		3
	9	9

11

	2	4
×		2
	4	8

12

	3	0
×		3
	9	0

Set out these questions yourself to answer them.

13 11 × 5 = ?

	T	U
	1	1
×		5
	5	5

14 44 × 2 = ?

	T	U
	4	4
×		2
	8	8

15 32 × 3 = ?

	T	U
	3	2
×		3
	9	6

16 11 × 6 = ?

	T	U
	1	1
×		6
	6	6

Problem solving

17 Multiply 13 by 3.

	1	3
×		3
	3	9

39

18 Jo buys two chocolate bars. Each costs 33p. How much does Jo pay?

	3	3
×		2
	6	6

66p

19 Find three lots of £21.

	2	1
×		3
	6	3

£63

20 Each bag contains 43 sweets.
How many sweets are in two bags?

	4	3
×		2
	8	6

86

How did I find Step 1? ☐ Easy ☐ OK ☐ Difficult

Step 2: Two-digit × one-digit carrying units to tens

In these questions, when you multiply the units digit of the top number by the bottom number the answer is greater than 9.

Can you see that 9 × 3 here is 27?

	T	U
	2	9
×		3

What to do

29 × 3 = ?

	T	U
	2	9
×		3
		7
	2	

1 Multiply the units digit of the top number by the bottom number. 9 × 3 = 27. Think of each set of **10 units** as being **1 ten**. Rather than writing 27 in the units column write the 2 under the line in the tens column. This is called '**carrying**'. Write the 7 in the units column.

	2	9
×		3
	8	7
	2	

2 Now, multiply the tens digit of the top number by the bottom number. 2 tens × 3 = 6 tens.

3 Before writing the answer, add on any tens you have carried. So here add 2 tens to the 6 tens to make 8 tens. Write 8 in the tens column.

Now you try

1

	T	U
	1	7
×		5
	8	5
	3	

2

	T	U
	2	4
×		4
	9	6
	1	

3

	T	U
	2	6
×		3
	7	8
	1	

4

	T	U
	1	8
×		4
	7	2
	3	

5

	T	U
	2	5
×		3
	7	5
	1	

6

	T	U
	2	3
×		4
	9	2
	1	

7

	T	U
	1	9
×		3
	5	7
	2	

8

	T	U
	1	3
×		5
	6	5
	1	

More practice

9

	1	6
×		4
	6	4

2

10

	1	8
×		5
	9	0

4

11

	2	7
×		3
	8	1

2

12

	1	9
×		4
	7	6

3

Set out these questions yourself to answer them.

13 17 × 4 = ?

	T	U
	1	7
×		4
	6	8

2

14 24 × 3 = ?

	T	U
	2	4
×		3
	7	2

1

15 19 × 5 = ?

	T	U
	1	9
×		5
	9	5

4

16 13 × 4 = ?

	T	U
	1	3
×		4
	5	2

1

Problem solving

17 What are five lots of 16?

	1	6
×		5
	8	0

3

80

18 Three brothers each have £17.
How much do they have altogether?

	1	7
×		3
	5	1

2

£51

19 Multiply 16 by 3.

	1	6
×		3
	4	8

1

48

20 In a school hall, the children put out five rows of chairs. There are 14 chairs in each row. How many chairs altogether?

	1	4
×		5
	7	0

2

70

How did I find Step 2? ☐ Easy ☐ OK ☐ Difficult

Step 3: Two-digit × one-digit carrying units to tens

The questions on this page are answered in the same way as in Step 1 and Step 2, but include multiplying by 6, 7, 8 and 9. Not every question needs carrying. You must decide if it needs carrying or not.

What to do

14 × 6 = ?

	T	U
	1	4
×		6
		4
	2	

1. Multiply the units digit of the top number by the bottom number. 4 × 6 = 24. If the answer is more than 9, think of each set of 10 units as being 1 ten. Rather than writing 24 in the units column, carry the 2 under the line in the tens column. Just write the 4 units in the units column.
2. Now, multiply the tens digit of the top number by the bottom number. 1 ten × 6 = 6 tens.
3. Before writing the answer, add on any tens you have carried. So here add 2 tens to the 6 tens to make 8 tens.

	1	4
×		6
	8	4
	2	

Now you try

Watch out as some questions do not need carrying at all!

1

	1	6
×		6
	9	6
	3	

2

	1	1
×		9
	9	9

3

	1	3
×		6
	7	8
	1	

4

	1	2
×		7
	8	4
	1	

5

	1	5
×		6
	9	0
	3	

6

	1	2
×		8
	9	6
	1	

7

	1	1
×		6
	6	6

8

	2	3
×		4
	9	2
	1	

More practice

Set out these questions yourself to answer them.

9 14 × 7 = ?

	T	U
	1	4
×		7
	9	8
	2	

10 12 × 6 = ?

	T	U
	1	2
×		6
	7	2
	1	

11 11 × 8 = ?

	T	U
	1	1
×		8
	8	8

12 28 × 3 = ?

	T	U
	2	8
×		3
	8	4
	2	

Problem solving

Each of these questions has a missing digit. Can you work out which digit is missing each time?

13

	T	U
	1	(3)
×		7
	9	1
	2	

14

	T	U
	1	(9)
×		4
	7	6
	3	

15

	T	U
	(2)	6
×		3
	7	8
	1	

16

	T	U
	1	5
×		(7)
1	0	5
	3	

17 There are 32 children in a class.
Each child is given three pencils.
How many pencils are given out?

```
  3 2
×   3
  9 6
```

96

18 Football teams have 11 players.
How many players are in seven teams?

```
  1 1
×   7
  7 7
```

77

19 Apples cost 19p each. Malik buys five apples and pays with a £1 coin.
How much change does he get?

```
  1 9
×   5
  9 5
  4
```

5p

How did I find Step 3? ☐ Easy ☐ OK ☐ Difficult

Step 4: Three-digit × one-digit carrying units to tens

For multiplying larger numbers, such as three-digit numbers, work in the same way as for earlier steps. Again, remember to work from right to left.

328 × 3

What to do

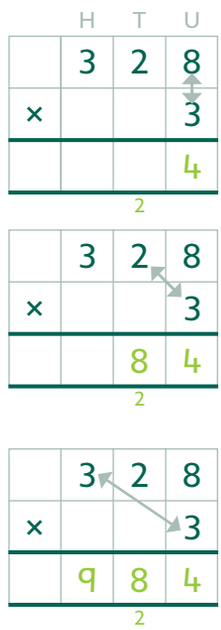
328 × 3 = ?

1 Multiply the units digit of the top number by the bottom number. 8 × 3 = 24. If the answer is more than 9, think of each set of 10 units as 1 ten. Carry the 2 tens under the line and write 4 in the units column.

2 Now, multiply the tens digit of the top number by the bottom number. 2 tens × 3 = 6 tens.

3 Before writing the answer, add on any tens you have carried. So here add 2 tens to the 6 tens to make 8 tens.

4 Then multiply the hundreds digit by the bottom number. 3 hundreds × 3 = 9 hundreds.



Now you try

1

	H	T	U
	2	1	5
×			4
	8	6	0
		2	

2

	H	T	U
	2	1	7
×			3
	6	5	1
		2	

3

	H	T	U
	1	1	9
×			5
	5	9	5
		4	

4

	H	T	U
	3	2	6
×			3
	9	7	8
		1	

5

	H	T	U
	1	1	4
×			7
	7	9	8
		2	

6

	H	T	U
	1	1	2
×			8
	8	9	6
		1	

More practice

7

	2	2	5
×			3
	6	7	5

1

8

	1	1	6
×			6
	6	9	6

3

9

	1	0	6
×			8
	8	4	8

4

Set out these questions yourself to answer them.

10 124 × 4 = ?

	H	T	U
	1	2	4
×			4
	4	9	6

1

11 319 × 3 = ?

	H	T	U
	3	1	9
×			3
	9	5	7

2

12 107 × 6 = ?

	H	T	U
	1	0	7
×			6
	6	4	2

4

Problem solving

13 A school buys three new laptops. Each costs £316. How much will they cost in total?

	3	1	6
×			3
	9	4	8

1

£948

14 Each day a factory makes 112 cars. How many cars are made in seven days?

	1	1	2
×			7
	7	8	4

1

784

15 A ball weighs 108g. How heavy are six of these balls?

	1	0	8
×			6
	6	4	8

4

648g

How did I find Step 4? ☐ Easy ☐ OK ☐ Difficult

Step 5: Three-digit × one-digit carrying tens to hundreds

So far, you have carried units over to the tens column. Sometimes, questions involve carrying tens over to the hundreds column.

What to do

142 × 3 = ?

1 Multiply the units digit of the top number by the bottom number. 2 × 3 = 6. If the answer is less than 9, just write the answer in the units column.

	H	T	U
	1	4	2
×			3
			6

2 Now, multiply the tens digit of the top number by the bottom number. 4 tens × 3 = 12 tens. If the answer is more than 9, think of each set of **10 tens** as being **1 hundred**. Rather than writing 12 in the tens column, carry the 1 hundred under the line in the hundreds column. Just write the 2 tens in the tens column.

	1	4	2
×			3
		2	6
	1		

3 Multiply the hundreds digit by the bottom number and remember to add any digits you have carried. 1 hundred × 3 = 3 hundreds. Add the carried hundred to get 4 hundreds and write 4 in the hundreds column.

	1	4	2
×			3
	4	2	6
	1		

Now you try

1

	H	T	U
	1	6	2
×			4
	6	4	8
	2		

2

	H	T	U
	2	9	3
×			3
	8	7	9
	2		

3

	H	T	U
	1	7	1
×			5
	8	5	5
	3		

4

	H	T	U
	2	7	2
×			3
	8	1	6
	2		

5

	H	T	U
	1	4	1
×			7
	9	8	7
	2		

6

	H	T	U
	1	5	1
×			6
	9	0	6
	3		

More practice

7

	2	8	2
×			3
	8	4	6

2

8

	2	4	1
×			4
	9	6	4

1

9

	1	2	1
×			8
	9	6	8

1

Set out these questions yourself to answer them.

10 121 × 7 = ?

	H	T	U
	1	2	1
×			7
	8	4	7

1

11 261 × 3 = ?

	H	T	U
	2	6	1
×			3
	7	8	3

1

12 181 × 5 = ?

	H	T	U
	1	8	1
×			5
	9	0	5

4

Problem solving

13 A person earns £271 per day for three days. How much money do they earn in total?

	2	7	1
×			3
	8	1	3

2

£813

14 Each day a factory makes 131 computers. How many computers are made in seven days?

	1	3	1
×			7
	9	1	7

2

917

15 Find the product of 191 and 4.

	1	9	1
×			4
	7	6	4

3

764

How did I find Step 5? ☐ Easy ☐ OK ☐ Difficult

Step 6: Two-digit × one-digit carrying tens to hundreds

With smaller numbers that have no hundreds to multiply, it is important to remember to write the carried number into the hundreds column. Don't forget it!

What to do

42 × 3 = ?

	H	T	U
		4	2
×			3
			6

1 Multiply the units digit of the top number by the bottom number. 2 × 3 = 6. If the answer is less than 9, just write the answer in the units column.

2 Now, multiply the tens digit of the top number by the bottom number. 4 tens × 3 = 12 tens. If the answer is more than 9, think of each set of 10 tens as being 1 hundred. Rather than writing 12 in the tens column, carry the 1 under the line in the hundreds column. Just write the 2 units in the tens column.

	H	T	U
		4	2
×			3
		2	6
	1		

3 As the first number has no hundreds, you have no more multiplying to do, but you must write the carried digit in the hundreds column to finish your answer.

	H	T	U
		4	2
×			3
	1	2	6
	1		

Now you try

1

	H	T	U
		6	3
×			3
	1	8	9
	1		

2

	H	T	U
		3	1
×			9
	2	7	9
	2		

3

	H	T	U
		7	1
×			6
	4	2	6
	4		

4

	H	T	U
		5	1
×			7
	3	5	7
	3		

5

	H	T	U
		7	2
×			4
	2	8	8
	2		

6

	H	T	U
		8	1
×			5
	4	0	5
	4		

7

	H	T	U
		8	2
×			3
	2	4	6
	2		

8

	H	T	U
		9	1
×			8
	7	2	8
	7		

More practice

Set out these questions yourself to answer them.

9 43 × 3 = ?

H	T	U
	4	3
×		3
1	2	9
1		

10 31 × 6 = ?

H	T	U
	3	1
×		6
1	8	6
1		

11 61 × 8 = ?

H	T	U
	6	1
×		8
4	8	8
4		

12 82 × 4 = ?

H	T	U
	8	2
×		4
3	2	8
3		

Problem solving

Each of these questions has a missing digit. Can you work out which digit is missing each time?

13

H	T	U
	(5)	2
×		4
2	0	8
2		

14

H	T	U
	6	2
×		(3)
1	8	6
1		

15

H	T	U
	(2)	1
×		9
1	8	9
1		

16

H	T	U
	(7)	1
×		7
4	9	7
4		

17 During fire practice the children in a school form three lines, with 73 children in each line. How many children are there altogether?

	7	3
×		3
2	1	9
2		

219

18 A shop sells coats costing £41 each. How much would the shop get if it sells seven of these coats?

	4	1
×		7
2	8	7
2		

£287

How did I find Step 6? ☐ Easy ☐ OK ☐ Difficult

Check-up test 1 Two- and three-digit × one-digit, with up to one carried digit

Step 1

1 34 × 2 = ?

	3	4
×		2
	6	8

2 32 × 3 = ?

	3	2
×		3
	9	6

3 22 × 4 = ?

	2	2
×		4
	8	8

Steps 2 and 3

4 23 × 4 = ?

	2	3
×		4
	9	2
	1	

5 17 × 5 = ?

	1	7
×		5
	8	5
	3	

6 14 × 6 = ?

	1	4
×		6
	8	4
	2	

Step 4

7 114 × 7 = ?

	1	1	4
×			7
	7	9	8
		2	

8 325 × 3 = ?

	3	2	5
×			3
	9	7	5
		1	

9 124 × 4 = ?

	1	2	4
×			4
	4	9	6
		1	

Step 5

10 131 × 7 = ?

	1	3	1
×			7
	9	1	7
		2	

11 281 × 3 = ?

	2	8	1
×			3
	8	4	3
		2	

12 162 × 4 = ?

	1	6	2
×			4
	6	4	8
		2	

1 ☐
2 ☐
3 ☐
4 ☐
5 ☐
6 ☐
7 ☐
8 ☐
9 ☐
10 ☐
11 ☐
12 ☐

Step 6

13 52 × 4 = ?

	5	2
×		4
2	0	8
	2	

14 71 × 5 = ?

	7	1
×		5
3	5	5
	3	

15 31 × 6 = ?

	3	1
×		6
1	8	6
	1	

13 ☐
14 ☐
15 ☐

Steps 1 to 6 mixed

Use the grid below for working.

16 What is the cost of six 62p chocolate bars? £3.72 or 372p

17 How heavy are three 214g packets of biscuits in total? 642g

18 Multiply 141 by 7. 987

19 What are four lots of 216kg? 864kg

20 Find the product of 3 and 272. 816

16 ☐
17 ☐
18 ☐
19 ☐
20 ☐

16)

	6	2	
×		6	
3	7	2	
3	1		

17)

	2	1	4
×			3
	6	4	2
		1	

18)

	1	4	1
×			7
	9	8	7
	2		

19)

	2	1	6
×			4
	8	6	4
		2	

20)

	2	7	2
×			3
	8	1	6
	2		

Total test score

Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
%	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100

20

Step 7: Two-digit × one-digit carrying twice

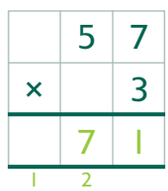
Now that you have learnt to carry once, you can multiply and carry twice. Always work from right to left as before.

What to do

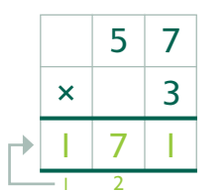
57 × 3 = ?

1 Multiply the units digit of the top number by the bottom number. 7 × 3 = 21. Carry the 2 tens across and write the 1 in the units column.

2 Now, multiply the tens digit of the top number by the bottom number. 5 tens × 3 = 15 tens. Add on the tens you have carried: 15 tens + 2 tens = 17 tens. Think of each set of 10 tens as being 1 hundred. Rather than writing 17 in the tens column, carry the 1 under the line in the hundreds column. Just write the 7 tens in the tens column.



3 As the first number has no hundreds, you have no more multiplying to do, but you must write the carried digit in the hundreds column to finish your answer.



Now you try

1

	3	7
×		5
1	8	5
1	3	

2

	4	4
×		9
3	9	6
3	3	

3

	7	5
×		6
4	5	0
4	3	

4

	9	4
×		7
6	5	8
6	2	

5

	3	8
×		4
1	5	2
1	3	

6

	8	4
×		5
4	2	0
4	2	

7

	8	6
×		3
2	5	8
2	1	

8

	9	4
×		8
7	5	2
7	3	

More practice

Set out these questions yourself to answer them.

9 46 × 3 = ?

H	T	U
	4	6
×		3
1	3	8
1	1	

10 54 × 6 = ?

H	T	U
	5	4
×		6
3	2	4
3	2	

11 62 × 8 = ?

H	T	U
	6	2
×		8
4	9	6
4	1	

12 78 × 4 = ?

H	T	U
	7	8
×		4
3	1	2
3	3	

Problem solving

Each of these questions has a missing digit. Can you work out which digit is missing each time?

13

	(5)	4
×		4
2	1	6
2	1	

14

	6	7
×		(3)
2	0	1
2	2	

15

	4	(5)
×		9
4	0	5
4	4	

16

	(7)	4
×		7
5	1	8
5	2	

17 Six children each raised £48 for charity.
How much did they raise altogether?

	4	8
×		6
2	8	8
2	4	

£288

18 A factory makes 63 bikes per hour.
How many does it make in eight hours?

	6	3
×		8
5	0	4
5	2	

504

How did I find Step 7? ☐ Easy ☐ OK ☐ Difficult

Step 8: Three-digit × one-digit carrying twice with answers less than 1000

These questions involve carrying twice in the same way as for Step 7. The answers here are always three-digit numbers.

What to do

258 × 3 = ?

1 Do the same as in Step 7. Multiply the units digit first and remember to carry any tens over. 8 × 3 = 24

	H	T	U
	2	5	8
×			3
			4
		2	

2 Then multiply the tens digit and remember to add the carried tens to the answer. 5 tens × 3 = 15 tens, 15 tens plus the 2 tens carried = 17 tens. Think of each set of 10 tens as 1 hundred and carry it across to the hundreds column.

	2	5	8
×			3
		7	4
	1	2	

3 Now, multiply the hundreds digit. 2 hundreds × 3 = 6 hundreds. Add on any hundreds that you have carried. 6 hundreds + 1 hundred = 7 hundreds. Write this in the hundreds column.

	2	5	8
×			3
	7	7	4
	1	2	

Now you try

1

	2	4	7
×			3
	7	4	1
	1	2	

2

	1	5	2
×			6
	9	1	2
	3	1	

3

	1	3	7
×			5
	6	8	5
	1	3	

4

	2	4	7
×			4
	9	8	8
	1	2	

5

	1	3	7
×			6
	8	2	2
	2	4	

6

	1	1	9
×			8
	9	5	2
	1	7	

More practice

7

	2	8	5
×			3
	8	5	5
	2	1	

8

	1	3	5
×			6
	8	1	0
	2	3	

9

	1	2	9
×			7
	9	0	3
	2	6	

Set out these questions yourself to answer them.

10 234 × 4 = ?

	H	T	U
	2	3	4
×			4
	9	3	6
	1	1	

11 279 × 3 = ?

	H	T	U
	2	7	9
×			3
	8	3	7
	2	2	

12 136 × 6 = ?

	H	T	U
	1	3	6
×			6
	8	1	6
	2	3	

Problem solving

13 A helicopter travels 245km each hour for three hours. How far does it travel?

	2	4	5
×			3
	7	3	5
	1	1	

735km

14 Each day a machine makes 142 laptops. How many are made in seven days?

	1	4	2
×			7
	9	9	4
	2	1	

994

15 Find the product of 134 and 7.

	1	3	4
×			7
	9	3	8
	2	2	

938

How did I find Step 8? ☐ Easy ☐ OK ☐ Difficult

Step 9: Three-digit × one-digit carrying twice with answers greater than 1000

Sometimes, you need to carry to the thousands column.

What to do

917 × 5 = ?

1 Multiply the units digit and carry any tens over. 7 × 5 = 35

	Th	H	T	U
		9	1	7
×				5
				5
			3	

2 Then multiply the tens digit and add the carried tens to the answer. 1 ten × 5 = 5 tens, 5 tens plus the 3 tens carried = 8 tens. Here, you don't need to carry at all as the answer is not greater than 9 tens.

	Th	H	T	U
		9	1	7
×				5
			8	5
			3	

3 Now, multiply the hundreds digit. 9 hundreds × 5 = 45 hundreds. Think of each set of **10 hundreds** as **1 thousand**. Rather than writing 45 in the hundreds column carry the 4 thousands under the line in the thousands column and write the 5 hundreds in the hundreds column.

	Th	H	T	U
		9	1	7
×				5
		5	8	5
	4		3	

4 As the first number has no thousands, you have no more multiplying to do, but you must write the carried digit in the thousands column to finish your answer.

	Th	H	T	U
		9	1	7
×				5
	4	5	8	5
	4		3	

Now you try

1

	Th	H	T	U
		7	1	8
×				4
	2	8	7	2
	2		3	

2

	Th	H	T	U
		5	2	9
×				3
	1	5	8	7
	1		2	

3

	Th	H	T	U
		6	1	9
×				5
	3	0	9	5
	3		4	

4

		4	1	2
×				6
	2	4	7	2
	2		1	

5

		3	1	3
×				7
	2	1	9	1
	2		2	

6

		6	0	5
×				8
	4	8	4	0
	4		4	

More practice

7

	9	1	8
×			3
2	7	5	4
2		2	

8

	4	1	5
×			4
1	6	6	0
1		2	

9

	7	0	9
×			9
6	3	8	1
6		8	

Problem solving

A palindromic number is one that is the same when read forwards or backwards, for example 626.

10 Write as many three-digit palindromic numbers as you can that have the tens digit 1, such as 717, 818, 313.

	1	

111, 212, 313, 414, 515, 616, 717, 818, 919

11 Multiply each of the palindromic numbers by 4 and write the answers in ascending order. Use spare squared paper for workings.

444, 848, 1252, 1656, 2060, 2464, 2868, 3272, 3676

Answer 'yes' or 'no' to each question.

12 Is the hundreds digit and unit digit the same in each answer? yes

13 Is 2646 one of the answers? no

14 Are there three answers that have the thousands digit 2? yes

15 Are there three answers that have the tens digit 5? no

How did I find Step 9? ☐ Easy ☐ OK ☐ Difficult

Step 10: Three-digit × one-digit carrying twice in any position

For this step, you will need to work out when to carry and when not to. The carrying will not always be in the same place.

What to do

941 × 5 = ?

1 Multiply the units digit and carry any tens over.

	Th	H	T	U
		9	4	1
×				5
				5

2 Then multiply the tens digit, adding any carried tens if there are any. Carry over to the hundreds if you need to.

		9	4	1
×				5
			0	5
			2	

3 Then multiply the hundreds digit, adding any carried hundreds if there are any.

		9	4	1
×				5
		7	0	5
	4		2	

4 As the first number has no thousands, you have no more multiplying to do, but you must write any carried thousands digits (if there are any) in the thousands column to finish your answer.

		9	4	1
×				5
	4	7	0	5
	4		2	

Now you try

1

	7	6	2
×			4
3	0	4	8
3	2		

2

	1	2	9
×			6
	7	7	4
	1	5	

3

	8	4	3
×			3
2	5	2	9
2	1		

4

	7	1	2
×			5
3	5	6	0
3		1	

5

	3	4	1
×			7
2	3	8	7
2	2		

6

	7	0	6
×			8
5	6	4	8
5		4	

More practice

7

	8	6	2
×			3
2	5	8	6
2		1	

8

	2	2	7
×			4
	9	0	8
	1	2	

9

	4	0	6
×			9
3	6	5	4
3		5	

Problem solving

Each of these questions has two missing digits. Can you work out which digits are missing each time?

10

	8	(6)	3
×			2
1	(7)	2	6
1		1	

11

	(7)	6	1
×			4
3	0	(4)	4
3		2	

12 A plane travels 824km each hour for three hours. How far does it travel?

	8	2	4
×			3
2	4	7	2
2		1	

2472km

13 Multiply 138 by 7.

	1	3	8
×			7
	9	6	6
	2	5	

966

14 How many eggs are there in 316 boxes of six eggs?

	3	1	6
×			6
1	8	9	6
1		3	

1896

15 Each DVD in a shop is sold for £7. How much does the shop get if it sells 251 DVDs?

	2	5	1
×			7
1	7	5	7
1		3	

£1757

How did I find Step 10? ☐ Easy ☐ OK ☐ Difficult

Step 11: Four-digit × one-digit with answers less than 10 000

For these questions, you must remember to multiply the thousands digit as you will be multiplying four-digit numbers.

What to do

1 527 × 3 = ?

1 As before, multiply the units digit and carry any tens over.

	Th	H	T	U
	1	5	2	7
×				3
				1
			2	

2 Then multiply the tens digit, adding any carried tens if there are any. Carry over to the hundreds if you need to.

	1	5	2	7
×				3
			8	1
			2	

3 Then multiply the hundreds digit, adding any carried hundreds if there are any.

	1	5	2	7
×				3
		5	8	1
	1		2	

4 Then multiply the thousands digit, adding any carried digits (if there are any) in the thousands column to finish your answer. The thousands digit of your answer will **not** be the same as the carried digit (as it was in Step 10).

	1	5	2	7
×				3
	4	5	8	1
	1		2	

Now you try

1

	Th	H	T	U
	1	6	3	7
×				2
	3	2	7	4
	1		1	

2

	Th	H	T	U
	2	5	8	1
×				3
	7	7	4	3
	1	2		

3

	Th	H	T	U
	1	4	1	3
×				7
	9	8	9	1
	2		2	

4

	2	4	1	5
×				4
	9	6	6	0
	1		2	

5

	1	4	7	1
×				5
	7	3	5	5
	2	3		

6

	1	5	0	8
×				6
	9	0	4	8
	3		4	

More practice

Set out these questions yourself to answer them.

7 2863 × 3 = ?

	Th	H	T	U
	2	8	6	3
×				3
	8	5	8	9
	2	1		

8 1614 × 4 = ?

	Th	H	T	U
	1	6	1	4
×				4
	6	4	5	6
	2		1	

9 1421 × 6 = ?

	Th	H	T	U
	1	4	2	1
×				6
	8	5	2	6
	2	1		

10 1904 × 5 = ?

	Th	H	T	U
	1	9	0	4
×				5
	9	5	2	0
	4		2	

Problem solving

11 A relay team consists of six cyclists. Each cyclist cycles 1341m. How far does the team cycle in total?

	1	3	4	1
×				6
	8	0	4	6
	2		2	

8046m or 8.046km

12 A cinema holds 1408 people. For seven nights it was full. How many people went to the cinema that week?

	1	4	0	8
×				7
	9	8	5	6
	2		5	

9856

How did I find Step 11? ☐ Easy ☐ OK ☐ Difficult

Check-up test 2 Two-, three- and four-digit × one digit, carrying twice

Step 7

1 56 × 3 = ?

	5	6
×		3
1	6	8
1	1	

2 94 × 7 = ?

	9	4
×		7
6	5	8
6	2	

3 74 × 4 = ?

	7	4
×		4
2	9	6
2	1	

1 ☐
2 ☐
3 ☐

Step 8

4 249 × 3 = ?

	2	4	9
×			3
	7	4	7
	1	2	

5 164 × 4 = ?

	1	6	4
×			4
	6	5	6
	2	1	

6 127 × 7 = ?

	1	2	7
×			7
	8	8	9
	1	4	

4 ☐
5 ☐
6 ☐

Step 9

7 917 × 5 = ?

	9	1	7
×			5
4	5	8	5
4		3	

8 824 × 4 = ?

	8	2	4
×			4
3	2	9	6
3		1	

7 ☐
8 ☐

Step 10

9

	8	5	3
×			3
2	5	5	9
2	1		

10

	7	1	2
×			8
5	6	9	6
5		1	

9 ☐
10 ☐

Step 11

11 1481 × 4 = ?

	1	4	8	1
×				4
	5	9	2	4
	1	3		

12 1815 × 5 = ?

	1	8	1	5
×				5
	9	0	7	5
	4		2	

Steps 7 to 11 mixed

Use the grid below for working.

13 What is the cost of four £63 games? £252

14 What is the total length of a piece of ribbon cut into three 285cm lengths? 855cm

15 Multiply 416 by 4. 1664

16 How many eggs are in 314 boxes of six eggs? 1884

17 Find the product of 3 and 2732. 8196

11 ☐
12 ☐
13 ☐
14 ☐
15 ☐
16 ☐
17 ☐

13)

	6	3	
×		4	
2	5	2	
2	1		

14)

	2	8	5	
×			3	
	8	5	5	
	2	1		

15)

	4	1	6
×			4
1	6	6	4
1		2	

16)

	3	1	4
×			6
1	8	8	4
1		2	

17)

	2	7	3	2
×				3
	8	1	9	6
	2			

Total test score

Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
%	6	12	18	24	29	35	41	47	53	59	65	71	76	82	88	94	100

☐ 17

Step 12: Four-digit × one-digit carrying up to four times

Carrying should be done whenever you multiply a digit and get an answer that is greater than 9. Here, you'll carry when multiplying every digit.

What to do

5847 × 3 = ?

	TTh	Th	H	T	U
		5	8	4	7
×					3
					1
				2	

1 As before, multiply the units digit and carry any tens over. 7 × 3 = 21. Carry the 2 tens.

		5	8	4	7
×					3
				4	1
			1	2	

2 Then multiply the tens digit, adding the carried tens. 4 tens × 3 = 12 tens, 12 tens + 2 tens = 14 tens. Carry the 1 hundred.

		5	8	4	7
×					3
			5	4	1
		2	1	2	

3 Then multiply the hundreds digit, adding the carried hundreds. 8 hundreds × 3 = 24 hundreds. 24 hundreds + 1 hundred = 25 hundreds. Carry the 2 thousands.

		5	8	4	7
×					3
		7	5	4	1
	1	2	1	2	

4 Then multiply the thousands digit, adding the carried thousands. 5 thousands × 3 = 15 thousands, 15 thousands + 2 thousands = 17 thousands. Carry the 1 ten thousand.

		5	8	4	7
×					3
	1	7	5	4	1
	1	2	1	2	

5 As the first number has no ten thousands, you have no more multiplying to do, but you must write any carried ten thousands digits above to finish your answer.

Now you try

1

	3	2	4	7
×				5
1	6	2	3	5
1	1	2	3	

2

	6	3	8	4
×				4
2	5	5	3	6
2	1	3	1	

3

	6	2	3	8
×				6
3	7	4	2	8
3	1	2	4	

4

	9	3	2	7
×				9
8	3	9	4	3
8	2	2	6	

More practice

Set out these questions yourself to answer them.

5 5243 × 8 = ?

TTh	Th	H	T	U
	5	2	4	3
×				8
4	1	9	4	4
4	1	3	2	

6 1925 × 7 = ?

TTh	Th	H	T	U
	1	9	2	5
×				7
1	3	4	7	5
1	6	1	3	

7 7777 × 5 = ?

TTh	Th	H	T	U
	7	7	7	7
×				5
3	8	8	8	5
3	3	3	3	

8 1234 × 9 = ?

TTh	Th	H	T	U
	1	2	3	4
×				9
1	1	1	0	6
1	2	3	3	

Problem solving

9 Choose an even number and repeat it four times to make a four-digit number, for example 6666. Multiply the number by 5. Do this several times. Write what you notice about the digits of the answer.

	6	6	6	6
×				5
3	3	3	3	0
3	3	3	3	

The units digit is 0 and each other digit is half the chosen even number.

10 A theatre holds 5735 people. For seven nights it was full. How many people went to the theatre that week?

	5	7	3	5
×				7
4	0	1	4	5
4	5	2	3	

40 145

How did I find Step 12? ☐ Easy ☐ OK ☐ Difficult

Step 13: Four- and five-digit × one-digit

When calculating, it is good practice to make an estimate first and then use it to check your answer. For these questions, you'll have to decide whether you need to carry digits or not. Some also involve five-digit numbers.

What to do

1 For each of these questions, make an estimate first.

2 As before, work from right to left, carrying if you need to.

3 Check your final answer against your estimate and see if your answer seems reasonable. Is 153 225 close to 150 000?

30 645 × 5 = ?

30 000 × 5 = 150 000

	TTh	Th	H	T	U
	3	0	6	4	5
×					5
1	5	3	2	2	5
1		3	2	2	

Now you try

Remember to make an estimate first.

1 20 000 × 3 = 60 000

	TTh	Th	H	T	U
	2	1	7	9	5
×					3
	6	5	3	8	5
		2	2	1	

2 40 000 × 5 = 200 000

	TTh	Th	H	T	U
	3	9	8	1	6
×					5
1	9	9	0	8	0
1	4	4		3	

3 10 000 × 7 = 70 000

	TTh	Th	H	T	U
		9	8	1	4
×					7
	6	8	6	9	8
	6	5		2	

4 30 000 × 8 = 240 000

	TTh	Th	H	T	U
	3	0	1	6	1
×					8
2	4	1	2	8	8
2		1	4		

More practice

Make an estimate for each question and use it to check whether an error has been made. Circle each of the errors in the answers and correct them.

5 4000 × 8 = 32 000

		3	9	8	6
×					8
	1^{3}	1	8	8	8
	3	7	6	4	

6 5000 × 9 = 45 000

		5	1	3	2
×					9
	4	6	1	8	8
	4	1	2	1	

7 30 000 × 6 = 180 000

	2	9	7	8	6
×					6
1	2^{7}	8	7	1	6
1	5	4	5	3	

8 5000 × 7 = 35 000

		5	0	2	7
×					7
	3	5	8^{1}	8	9
	3		1	4	

Problem solving

9 Jack earns £26 454 each year for two years. How much does he earn?

	2	6	4	5	4
×					2
	5	2	9	0	8
		1		1	

£52 908

10 Find the total of 4172 × 6 and 3626 × 8.

	4	1	7	2	
×					6
2	5	0	3	2	
2	1	4	1		

	3	6	2	6	
×					8
2	9	0	0	8	
2	5	2	4		

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

25 032 + 29 008 = 54 040

How did I find Step 13? ☐ Easy ☐ OK ☐ Difficult

Step 14: Six- and seven-digit × one-digit

What to do

1. You've mastered multiplying by single-digit numbers, so now try it for even larger numbers!
2. Follow the same approach as before and remember to estimate first.

	M	HTh	TTh	Th	H	T	U
	2	5	3	0	6	4	8
×							5
	1	2	6	5	3	2	4	0
	1	2	1		3	2	4	

Now you try

Remember to make an estimate first and use it to check your final answer.

1 Five hundred and thirty thousand, six hundred and forty-five times four.

500 000 × 4 = 2 000 000

	M	HTh	TTh	Th	H	T	U
		5	3	0	6	4	5
×							4
	2	1	2	2	5	8	0
	2	1		2	1	2	

2 Two million, one hundred and nineteen thousand and twelve times three.

2 000 000 × 3 = 6 000 000

	M	HTh	TTh	Th	H	T	U
	2	1	1	9	0	1	2
×							3
	6	3	5	7	0	3	6
			2				

3 Nine hundred and seventeen thousand, eight hundred and seven times six.

900 000 × 6 = 5 400 000

	M	HTh	TTh	Th	H	T	U
		9	1	7	8	0	7
×							6
	5	5	0	6	8	4	2
	5	1	4	4		4	

4 Seven million and forty-one thousand, seven hundred and eighty-one times nine.

7 000 000 × 9 = 63 000 000

	M	HTh	TTh	Th	H	T	U
	7	0	4	1	7	8	1
×							9
	6	3	3	7	6	0	2	9
	6		3	1	7	7		

More practice

Use the grids below for working. Remember to estimate first.

5 Two hundred and ten thousand, nine hundred and seven times three.

632 721

6 Three million, eight hundred and fourteen thousand and six times two.

7 628 012

5)		2	1	0	9	0	7			6)		3	8	1	4	0	0	6	
	×						3				×							2	
		6	3	2	7	2	1					7	6	2	8	0	1	2	
				2		2						1					1		

7 Four hundred and sixty-one thousand, six hundred and twelve times eight.

3 692 896

8 Six million, eight hundred and three thousand and thirty times seven.

47 621 210

7)		4	6	1	6	1	2			8)		6	8	0	3	0	3	0	
	×						8				×							7	
	3	6	9	2	8	9	6				4	7	6	2	1	2	1	0	
	3	4	1	4		1					4	5		2		2			

Problem solving

9 Multiply several numbers made from six or seven consecutive digits by 9, for example 1234567 × 9 or 3456789 × 9. Write any patterns you notice.

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

Each answer will have at least four adjacent digits that are 1, for example 11 111 103, 31 111 101, etc.

How did I find Step 14? ☐ Easy ☐ OK ☐ Difficult

Check-up test 3 Four-, five-, six- and seven-digit × one digit

Step 12

1 9327 × 5 = ?

	9	3	2	7
×				5
4	6	6	3	5
4	1	1	3	

2 4322 × 9 = ?

	4	3	2	2
×				9
3	8	8	9	8
3	2	1	1	

1 ☐
2 ☐

Step 13

3 31 461 × 6 = ?

	3	1	4	6	1
×					6
1	8	8	7	6	6
1		2	3		

4 29 156 × 4 = ?

	2	9	1	5	6
×					4
1	1	6	6	2	4
1	3		2	2	

3 ☐
4 ☐

Step 14

5 Two million, one hundred and twelve thousand, three hundred and six times five.

	2	1	1	2	3	0	6
×							5
1	0	5	6	1	5	3	0
1			1	1		3	

5 ☐

6 Five million, two hundred and thirty thousand, six hundred and forty-five times nine.

	5	2	3	0	6	4	5
×							9
4	7	0	7	5	8	0	5
4	2	2		5	4	4	

6 ☐

Steps 12 to 14 mixed

Use the grids below for working.

7 Seven people each win £6473 on the lottery. What is their total win?

£45311 ☐ 7

8 Taking a year to be 525600 minutes, how many minutes are there in seven years?

3679200 mins ☐ 8

7)
$$\begin{array}{r} 6473 \\ \times \quad 7 \\ \hline 45311 \\ \hline 4\ 3\ 5\ 2 \end{array}$$

8)
$$\begin{array}{r} 525600 \\ \times \quad 7 \\ \hline 3679200 \\ \hline 3\ 1\ 3\ 4 \end{array}$$

9 Which is greater: 123456 × 6 or 234567 × 3?

123456 × 6, as 740736 is greater than 703701 ☐ 9

10 If an aeroplane travels 15750km per week, how far will it travel in six weeks?

94500km ☐ 10

9)
$$\begin{array}{r} 123456 \\ \times \quad 6 \\ \hline 740736 \\ \hline 1\ 2\ 2\ 3\ 3 \end{array}$$

$$\begin{array}{r} 234567 \\ \times \quad 3 \\ \hline 703701 \\ \hline 1\ 1\ 1\ 2\ 2 \end{array}$$

10)
$$\begin{array}{r} 15750 \\ \times \quad 6 \\ \hline 94500 \\ \hline 3\ 4\ 3 \end{array}$$

Total test score

Score	1	2	3	4	5	6	7	8	9	10
%	10	20	30	40	50	60	70	80	90	100

☐ 10

Step 15: Three-digit × 10 or × 20

When multiplying by 10, the digits of the number being multiplied move one place to the left. Here, we need to put a zero in the units column to complete the answer. Now read how to multiply by 20.

	Th	H	T	U
		2	3	7
×			1	0
	2	3	7	**0**

What to do

237 × 20 = ?

1 To multiply by 20, first write zero in the units column.

2 Then multiply the top number by 2, in the same way as before, but writing the digits of the answer one place to the left. Start by multiplying the units digit by 2, so 7 × 2 = 14. Carry 1 across and write the 4.

3 Now, multiply the tens digit and add the carried ten.

4 Then multiply the hundreds digit and add any carried digits.

5 Check your answer is the same as doubling the number and then multiplying by 10.

	Th	H	T	U
		2	3	7
×			2	0
				0

		2	3	7
×			2	0
			4	**0**

		2	3	7
×			2	0
	4	7	4	**0**

Now you try

1

		3	1	8
×			1	0
	3	1	8	**0**

2

		8	4	7
×			1	0
	8	4	7	**0**

3

		3	1	8
×			2	0
	6	3	6	**0**

4

		4	7	9
×			2	0
	9	5	8	**0**

5

		8	3	6
×			2	0
1	6	7	2	**0**

6

		7	8	7
×			2	0
1	5	7	4	**0**

More practice

7

		6	8	7
×			2	0
1	3	7	4	0

8

		8	9	3
×			2	0
1	7	8	6	0

Set out these questions yourself to answer them.

9 472 × 20 = ?

TTh	Th	H	T	U
		4	7	2
×			2	0
	9	4	4	0

10 586 × 20 = ?

TTh	Th	H	T	U
		5	8	6
×			2	0
1	1	7	2	0

Problem solving

Work out which of these answers are correct and which are wrong.
Find the correct answers for those that are wrong.

11 127 × 20 = 254

		1	2	7
×			2	0
2	5	4	0	

2540

12 432 × 20 = 8640

		4	3	2
×			2	0
8	6	4	0	

✓

13 567 × 20 = 11 340

		5	6	7
×			2	0
1	1	3	4	0

✓

14 845 × 20 = 1690

		8	4	5
×			2	0
1	6	9	0	0

16 900

How did I find Step 15? ☐ Easy ☐ OK ☐ Difficult

Step 16: Three-digit × any two-digit multiple of 10

Now that you can multiply by 10 or 20, you can multiply by 30, 40, 50 or any other two-digit multiple of 10.

638 × 40

What to do

638 × 40 = ?

1 As you are multiplying by a multiple of 10, first write zero in the units column.

	TTh	Th	H	T	U
			6	3	8
×				4	0
					0

2 Then multiply the three-digit number by the other digit of the multiple of 10, here by 4, writing the digits of the answer one place to the left. Start with the units as before. 8 × 4 = 32. Carry 3 across and write the 2.

			6	3	8
×				4	0
				2	**0**
			3		

3 Now, multiply the tens digit and add the carried digit. Carry 1 across and write the 5.

			6	3	8
×				4	0
			5	2	**0**
		1	3		

4 Then multiply the hundreds digit, add the carried digit and complete your answer.

			6	3	8
×				4	0
2	5	5	2		**0**
2	1	3			

Now you try

1

		8	3	6
×			4	0
3	3	4	4	**0**
3	1	2		

2

		7	8	7
×			9	0
7	0	8	3	**0**
7	7	6		

3

		9	3	5
×			3	0
2	8	0	5	**0**
2	1	1		

4

		7	8	7
×			8	0
6	2	9	6	**0**
6	6	5		

More practice

5

		7	4	5
×			6	0
4	4	7	0	0

4 2 3

6

		4	9	1
×			7	0
3	4	3	7	0

3 6

Set out these questions yourself to answer them.

7 888 × 50 = ?

TTh	Th	H	T	U
		8	8	8
×			5	0
4	4	4	0	0

4 4 4

8 664 × 90 = ?

TTh	Th	H	T	U
		6	6	4
×			9	0
5	9	7	6	0

5 5 3

Problem solving

9 Multiply 678 by 30.

		6	7	8
×			3	0
2	0	3	4	0

2 2 2

20 340

10 Taking a year to be 365 days, how many days are there in 50 years?

		3	6	5
×			5	0
1	8	2	5	0

1 3 2

18 250 days

11 Find 70 lots of 587.

		5	8	7
×			7	0
4	1	0	9	0

4 6 4

41 090

12 Each person on a plane has paid £60 for their ticket. If there are 264 people on the plane, how much was paid?

		2	6	4
×			6	0
1	5	8	4	0

1 3 2

£15 840

How did I find Step 16? ☐ Easy ☐ OK ☐ Difficult

Step 17: Four- and five-digit × any two-digit multiple of 10

Multiplying four- or five-digit numbers by a multiple of 10 is just the same!

What to do

10 642 × 70 = ?

HTh	TTh	Th	H	T	U
	1	0	6	4	2
×				7	0
					0

1 As you are multiplying by a multiple of 10, first write zero in the units column.

	1	0	6	4	2
×				7	0
				4	0
			1		

2 Then multiply the large number by the other digit of the multiple of 10, here by 7, writing the digits of the answer one place to the left. Start with the units. 7 × 2 = 14. Carry 1 across and write the 4.

	1	0	6	4	2
×				7	0
			9	4	0
		2	1		

3 Now, multiply the tens digit and add the carried digit. Carry 2 across and write the 9.

	1	0	6	4	2
×				7	0
7	4	4	9	4	0
	4	2	1		

4 Then multiply the hundreds digit, add the carried digit and continue in this way to complete your answer.

Now you try

1

		1	0	7	9	5
×					9	0
	9	7	1	5	5	0
		7	8	4		

2

			5	8	8	6
×					4	0
	2	3	5	4	4	0
	2	3	3	2		

3

		3	0	6	4	5
×					6	0
1	8	3	8	7	0	0
1		3	2	3		

4

		3	2	9	7	5
×					8	0
2	6	3	8	0	0	0
2	2	7	6	4		

More practice

Use the grids below for working.

5 8624 × 30 = ? 258 720

5)				8	6	2	4	
	×					3	0	
		2	5	8	7	2	0	
		2	1		1			

6 14 644 × 70 = ? 1 025 080

6)				1	4	6	4	4	
	×						7	0	
		1	0	2	5	0	8	0	
		1	3	4	3	2			

7 61 632 × 50 = ? 3 081 600

7)			6	1	6	3	2	
	×					5	0	
	3	0	8	1	6	0	0	
	3		3	1	1			

8 57 886 × 90 = ? 5 209 740

8)				5	7	8	8	6	
	×						9	0	
		5	2	0	9	7	4	0	
		5	7	7	7	5			

Problem solving

9 A group of 30 people won the lottery. They each got £4634. What was the total lottery win?

		4	6	3	4
×				3	0
1	3	9	0	2	0
1	1	1	1		

£139 020

10 There are 8760 hours in a normal year. Taking each year to be the same, how many hours are there in 70 years?

		8	7	6	0
×				7	0
6	1	3	2	0	0
6	5	4			

613 200 hours

How did I find Step 17? ☐ Easy ☐ OK ☐ Difficult

Step 18: Three- and four-digit × a multiple of 100 or 1000

Multiplying numbers by multiples of 100 or 1000 is similar to Step 17. Remember that when a number is multiplied by 100 the digits move two places to the left, and when multiplied by 1000 they move three places! So rather than one zero, use two or three!

What to do

2814 × 300 = ?

HTh	TTh	Th	H	T	U
		2	8	1	4
×			3	0	0
				0	**0**

1 If multiplying by a multiple of 100, first write a zero in the units and tens columns. If multiplying by a multiple of 1000, write a zero in the units, tens and hundreds columns.

2 Then, as normal, multiply by the other digit (here multiply by 3), writing the numbers in the boxes to the left of the zeros.

		2	8	1	4
×			3	0	0
8	4	4	2	**0**	**0**
2		1			

Now you try

1

		1	7	9	5
×			3	0	0
5	3	8	5	**0**	**0**
2	2	1			

2

			1	3	9	7
×			5	0	0	0
6	9	8	5	**0**	**0**	**0**
1	4	3				

3

			6	4	1
×			4	0	0
2	5	6	4	**0**	**0**
2	1				

4

			1	2	4	2
×			7	0	0	0
8	6	9	4	**0**	**0**	**0**
1	2	1				

More practice

Each answer given below is wrong. Write what error has been made and then give the correct answer each time.

5

			2	5	9
×		7	0	0	0
1	8	1	3	0	0

Error: Should have three zeros.

Correct answer: 1813000

6

				9	4	2
×				8	0	0
7	5	3	6	0	0	0

Error: Only needs two zeros.

Correct answer: 753600

7

			4	8	7	4
×			2	0	0	0
8	7	4	8	0	0	0

Error: Forgotten to add a carried digit.

Correct answer: 9748000

8

		1	2	4	2
×			3	0	0
	7	2	6	0	0

Error: Forgotten to multiply last digit.

Correct answer: 372600

Problem solving

Answer 'true' or 'false' to each question.

9 4672 × 100 = 467200

		4	6	7	2
×			1	0	0
4	6	7	2	0	0

true

10 1234 × 2000 = 246800

		1	2	3	4
×			2	0	0	0
2	4	6	8	0	0	0

false

11 333 × 3000 = 999000

			3	3	3
×		3	0	0	0
9	9	9	0	0	0

true

How did I find Step 18? ☐ Easy ☐ OK ☐ Difficult

Final test Multiplying by one-digit numbers or by multiples of 10, 100 or 1000

Steps 15 to 18

1 827 × 20 = ?

		8	2	7
×			2	0
1	6	5	4	0
1		1		

2 387 × 30 = ?

		3	8	7
×			3	0
1	1	6	1	0
1	2	2		

3 374 × 100 = ?

		3	7	4
×		1	0	0
3	7	4	0	0

4 2375 × 800 = ?

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

5 5645 × 3000 = ?

				5	6	4	5
×				3	0	0	0
1	6	9	3	5	0	0	0
1	1	1	1				

6 34 645 × 900 = ?

			3	4	6	4	5
×					9	0	0
3	1	1	8	0	5	0	0
3	4	5	4	4			

Steps 1 to 18 mixed

Use the grid below for working.

7 In Australia, a train travels at 124km per hour for five hours without stopping. How far does it travel in that time?

620km

8 In her part-time job Julie earns £7563 each year. How much does she earn in three years?

£22 689

7)		1	2	4					8)		7	5	6	3			
	×			5						×				3			
		6	2	0						2	2	6	8	9			
		1	2							2	1	1					

Use the grid below for working.

9 A factory makes 124 580 shoes each year. How many does it make in eight years?

996 640 ☐ 9

10 A tube of sweets has nine sweets per pack. How many sweets are in 674 packs?

6066 ☐ 10

11 How many minutes in 348 hours?

20 880 mins ☐ 11

12 Taking a year to be 365 days, how many days in 20 years?

7300 days ☐ 12

13 Each employee in a business is given £348 as a bonus. If there are 400 employees, how much is given altogether?

£139 200 ☐ 13

14 Find the product of 3562 and 300.

1 068 600 ☐ 14

9)

	1	2	4	5	8	0	
×						8	
	9	9	6	6	4	0	
	1	3	4	6			

10)

	6	7	4				
×			9				
	6	0	6	6			
	6	6	3				

11)

		3	4	8			
×			6	0			
	2	0	8	8	0		
	2	2	4				

12)

	3	6	5				
×		2	0				
	7	3	0	0			
	1	1					

13)

			3	4	8		
×			4	0	0		
	1	3	9	2	0	0	
	1	1	3				

14)

			3	5	6	2	
×				3	0	0	
	1	0	6	8	6	0	0
	1	1	1				

Total test score

Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14
%	7	14	21	29	36	43	50	57	64	71	79	86	93	100

☐ 14