

## Step 1: Three- and four-digit $\times$ one-digit

In **Multiplication 1** you learnt how to multiply by one-digit numbers, such as  $847 \times 7$ . In this book you will learn how to do **long multiplication**, where you multiply by two-, three- or four-digit numbers. First we will revise one-digit multiplication.

### What to do (a reminder)

- Multiply the digits of the top number, working from right to left. If you get more than 9 in any multiplication, carry sets of ten over to the column to the left.  $7 \times 7 = 49$  so write 9 in the units column and carry the 4 tens over. Write the carried tens below the line.
- Then multiply the tens digit, adding any carried tens.  $4 \text{ tens} \times 7 = 28 \text{ tens}$ ,  $28 \text{ tens} + 4 \text{ carried tens} = 32 \text{ tens}$ . Write 2 in the tens column and carry the 3 hundreds.
- Then multiply the hundreds digit, adding the carried hundreds.  $8 \text{ hundreds} \times 7 = 56 \text{ hundreds}$ .  $56 \text{ hundreds} + 3 \text{ carried hundreds} = 59 \text{ hundreds}$ . Write 9 in the hundreds column and carry the 5 thousands.
- As the top number has no thousands you have no more multiplying to do, but you must write any carried thousands digits above the line to complete your answer.

$$847 \times 7 = ?$$

	TTh	Th	H	T	U
			8	4	7
$\times$					7
					9
					4

			8	4	7
$\times$					7
					2
					3
					4

			8	4	7
$\times$					7
					9
			5	9	2
					5
					3
					4

### Now you try

**1**

		9	1	4	8
$\times$					5
					0
					4
					2

**2**

			3	9	6
$\times$					8
					8
					4

**3**

			7	6	1
$\times$					6
					6
					6
					3

**4**

		2	9	8	7
$\times$					4