Curriculum objectives

● To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.

Success criteria

● I can perform short multiplication for multiplying by 7.

You will need

Equipment

0–9 number cards

Differentiation

Less confident learners

Ask children to practise multiplying by a different number, such as 3, 4 or 6.

More confident learners

Let children choose four digit cards and begin to multiply four-digit numbers by 7.

Lesson 3

Oral and mental starter 40

Main teaching activities

Whole-class work: Write 584 x 7 on the board. Invite a child to set out the question as a written three-digit x one-digit multiplication on the board. Revise the method of short multiplication, in expanded and condensed form:

```
Th H  T  U                 Th H  T  U
    5  8  4                     5  8  4
×          7          or   ×          7
        2  8               4  0  8  8
    5  6  0                    5  2
3  5  0  0
4  0  8  8
```

Choose further three-digit numbers to multiply by 7. Invite children to the front to work through the different examples, encouraging them to attempt the condensed form (short multiplication) and to describe the process in their own words.

Independent work: Provide each child with a set of 0–9 number cards. Ask them to pick sets of three cards to form three-digit numbers. They should use short multiplication to multiply each number by 7.

Progress check: Ask: *Can you describe what you did to reach this answer?*

Review

Take feedback on multiplications the children have written. Revise the multiples of 7 again and remind children of the importance of knowing all their tables facts by heart.

Curriculum objectives

● To use place value, known and derived facts to divide.

Success criteria

● I can use short division with exact answers when dividing by a one-digit number and can use short multiplication to check.

You will need

Equipment

Individual whiteboards

Differentiation

Less confident learners

Ask children to focus on dividing by 3 or 4 only.

More confident learners

These children should focus on dividing by 6 and 8 only.

Lesson 4

Oral and mental starter 37

Main teaching activities

Whole-class work: Write 855 × 3 = [ ] on the board and ask children to set out the question for short division. Demonstrate the method and discuss how digits are carried to the next column, moving right. For example:

```
          2  8  5
3 ) 8 5 5      3 ) 8 ²5 ¹5
```

Remind children to multiply 285 by 3 to give 855 as a means of checking their answer. Show how short multiplication can be used to check this. Demonstrate other examples in the same way, including those where digits are carried twice (for example, 936 ÷ 4, 984 ÷ 6, 952 ÷ 7), asking children to work out answers on their whiteboards. Show too an example where the hundreds digit is smaller than the divisor (say, 296 ÷ 4), giving a two-digit answer.

Paired work: Write these numbers on the board: 960, 912, 816, 864, 672, 624, 720, 528, 432, 336, 384. Working in pairs, ask children to each choose a number and divide it by 3, 4, 6 or 8. Each should work out their answers using short division and record them: 528 ÷ 6 = 88, 384 ÷ 3 = 128 (and so on). They should then swap questions and answers and use short multiplication to check each other's calculations.

Progress check: Ask: *Describe what you did to reach this answer?*

Review

Invite children to write some of their divisions on the board and describe strategies they used to work each out.