

Multiplication and division facts for the 10-times table

Prior learning

- Can solve one-step problems involving multiplication and division by using concrete objects, pictorial representations and arrays.

Learn

- Look at the charts for the 10-times table and for dividing by 10 on page 30 of the textbook. Spend time discussing what numbers look like if they're answers in the 10-times table. Use number lines, 100-squares and multiplication tables to look at the relationship between multiplication and addition, modelling written conventions for each.
- Although the links to *100 Maths Lessons Year 2* focus on more than one times table each time, they contain a wide range of lesson ideas and resources that can be adapted to focus on the 10-times table only if desired.

Talk maths

- Use the textbook as the basis for a discussion about related facts. Choose a fact from the 10-times table as a starting point each time. It is important for children to realise that if they know one fact, then they can easily derive three others.

Activities

- The questions can easily be extended to cover the rest of the 10-times table. The links to *100 Maths Lessons Year 2* and the *Year 2 Practice Book* provide various resources for further practice.

Problems

- Encourage the children to create their own problems focused on the 10-times table. Ensure that they are able to use multiplication or division with confidence.

Curriculum objectives

- To recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
- To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs.

Success criteria

- I can recall, write and use multiplication and division facts for the 10-times tables.

Multiplication and division facts for the 10-times table

Learn

These are the signs that are used in multiplication and division.

\times means multiply. \div means divide.

Remember the word **multiple**. It means the answer when you multiply.

So, in the 10-times table the multiples are: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120.



All multiples in the 10-times table have a 0 ones digit.

10-times table	Dividing by 10
$1 \times 10 = 10$	$10 \div 10 = 1$
$2 \times 10 = 20$	$20 \div 10 = 2$
$3 \times 10 = 30$	$30 \div 10 = 3$
$4 \times 10 = 40$	$40 \div 10 = 4$
$5 \times 10 = 50$	$50 \div 10 = 5$
$6 \times 10 = 60$	$60 \div 10 = 6$
$7 \times 10 = 70$	$70 \div 10 = 7$
$8 \times 10 = 80$	$80 \div 10 = 8$
$9 \times 10 = 90$	$90 \div 10 = 9$
$10 \times 10 = 100$	$100 \div 10 = 10$
$11 \times 10 = 110$	$110 \div 10 = 11$
$12 \times 10 = 120$	$120 \div 10 = 12$

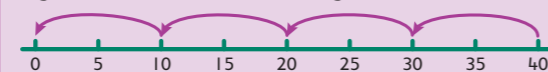
Which of these numbers are in the 10-times table?
15 90 25 40

Look at the ones digit. Only if it is a 0 will it be in the 10-times table. So the answer is 90 and 40.

It is important to learn your tables so that you can remember these multiplication facts easily.

Tip

If you're not sure about a fact, try a number line like this.



Counting back from 40 in tens helps you to find $40 \div 10 = 4$.

Talk maths

Look carefully at this set of four number sentences. Say each number sentence.

$10 \times 5 = 50$ $5 \times 10 = 50$ $50 \div 10 = 5$ $50 \div 5 = 10$

All these number sentences are made from the multiplication fact $10 \times 5 = 50$.

Now say the first number sentence below.

Use the numbers to complete the others in the set.

$9 \times 10 = 90$ $10 \times ? = 90$

$90 \div ? = 9$ $90 \div ? = 10$

Remember, if you know a multiplication sentence you can use those numbers to make another multiplication and two division sentences.

Activities

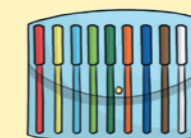
Copy and complete these times tables fact.

- 6×10
- 3×10
- 10×10
- $50 \div 10$
- $90 \div 10$

Problems

Brain-teaser

Jane has four packs of 10 pens. How many pens is that in total?



Brain-buster

Mya buys six packs of pens. Each pack has 10 pens. Mya gives two packs of pens to her sister. How many pens does Mya have now?

100 Maths Lessons Year 2 links:

- Spring 2, Week 3 (pages 143–148): use 10-times table facts to solve problems
- Summer 1, Week 3 (pages 184–189): use times table facts to solve problems involving multiplication and division
- Oral and mental starter 25 (page 85): recalling times tables facts
- Oral and mental starter 35 (page 127): practising times tables facts
- Oral and mental starter 58 (page 249): practising times tables facts

Year 2 Practice Book links:

- (pages 58–59): Using + and – to multiply and divide by 10