### Year 3, Unit 6, Week I, Lesson 3

# Division facts for the 8 multiplication table

National Curriculum attainment target

• Recall and use division facts for the 8 multiplication table

## Lesson objective

• Use halving to recall the division facts for the 8 multiplication table

#### Previous related lessons

Unit 4, Week 2, Lesson 3; Unit 6, Week 1, Lesson 1 Prerequisites for learning

Pupils need to:

count from 0 in multiples of 4 and 8

## • understand the concept of half

#### Vocabulary

multiple, half, divided by, division

#### Future related lesson

Unit 6, Week 1, Lesson 4

Success criteria

- Pupils can:
- use halving to recall the division facts for the 8 multiplication table
- recall all the division facts for the 8 multiplication table\_



Connect Year 3, Unit 6,

Week 1

# **Getting Started**

- Choose an activity from Number Multiplication and division.
- Choose an activity from Fluency in Number Facts: Y3/Y4 Multiplication and division.

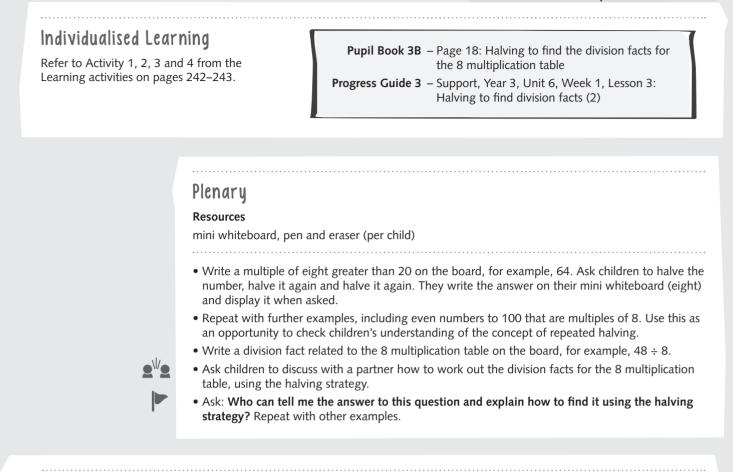


• Say: We have used our knowledge of multiplication facts to help us work out the answers to the division facts for the 8 multiplication table. Today we are going to learn another strategy to help us work out the division facts for the 8 multiplication table. Just as doubling can help us learn the 4 and 8 multiplication facts, we can use the inverse of doubling, which is halving, to help us with division.



- Display: Slides 1-4.
- Show Slide 1 and ask: What division facts can we write for this array?  $(24 \div 8 = 3; 24 \div 3 = 8)$
- Say: Discuss with your partner how we can divide 24 by 8 in our head using halving.
- Say: To divide 24 by eight, we can first halve 24, (demonstrate drawing a line vertically through the middle of the array to show the division in half) then divide each half in half again, (demonstrate drawing a line through the middle of one of the halves) then divide each half in half again. (demonstrate drawing a line vertically through the middle of one of the halves)
- Say: If we halve 24, the answer is 12, if we halve it again, the answer is six and if we halve it again, the answer is three. Write 12, 6 and 3 under the appropriate section of the array. Say: 24 ÷ 8 = 3.
- Repeat the process with the remaining arrays: 5 by 8 array; 6 by 8 array; 9 by 8 array.
- At appropriate intervals, ask children to discuss how to work out the division fact for the 8 multiplication table represented by the array using the halving strategy.
- Write a division fact related to the 8 multiplication table on the board, for example, 56 ÷ 8.
  Ask: Who can tell me the answer to this question and explain how to find it using the halving strategy? Repeat with other examples.

Ask children to divide two- or three-digit multiples of eight beyond 80 by eight using the halving strategy, for example,  $128 \div 8$  $(128 \div 2 = 64;$  $64 \div 2 = 32;$  $32 \div 2 = 16$  so  $128 \div 8 = 16$ )



## **Overcoming Barriers**

• If children find this strategy difficult, they may need support with halving numbers. Review halving even numbers to 100.