



# Maths - Multiplication and Division



## Lesson Sequence

1. Recognise equal groups
2. Make equal groups
3. Add equal groups
4. Introduce the multiplication symbol
5. Multiplication sentences
6. Use arrays
7. Make equal groups-grouping
8. Make equal groups-sharing
9. 2 times table
10. Divide by 2
11. Doubling and halving
12. Odd and even numbers
13. 10 times table
14. Divide by 10
15. 5 times table
16. Divide by 5
17. 5 and 10 times table
18. End of block assessment

## Vocabulary

- Groups of
- Equal Groups
- Arrays
- Multiply
- Divide
- Share
- Equal / Unequal
- Times
- Double
- Lots of
- Times Tables

## Sticky learning

### New Knowledge

- To recall multiplication and division facts for the two, five and ten multiplication tables, including recognising odd and even numbers
- To know that multiplication of two numbers can be done in any order (commutative)
- To know that division is not commutative
- To know the multiplication ( $\times$ ) and division ( $\div$ ) signs
- To know that an array is an arrangement of objects, numbers or pictures in equal columns or rows
- To know that multiplication and division are the inverse of each other (for example,  $4 \times 5 = 20$  and  $20 \div 5 = 4$ )

### New Skills

- To use multiplication and division facts for the 2, 5 and 10 multiplication tables
- To show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals ( $=$ ) signs
- To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
- To connect the 5 multiplication table to the divisions on the clock face
- To relate multiplication and division to grouping, and sharing, discrete and continuous quantities, to arrays and to repeated addition

### Grouping and Sharing

Making Equal Groups

There are 4 equal groups of socks.

Group Equally

Put the oranges into groups of 2.

Add Equal Groups

$2 + 2 + 2 + 2 = 8$  socks.

Share Equally

Share the oranges equally.

### Arrays and the Multiplication Symbol

An array is a group of objects or pictures in rows and columns.

3 rows of 5 blue dots = 15 blue dots

5 columns of 3 blue dots = 15 blue dots

The multiplication symbol is  $\times$

$3 \times 2 = 6$   
 $2 \times 3 = 6$   
 6 stars

$4 \times 2 = 8$   
 $2 \times 4 = 8$   
 8 rectangles

### 2, 5 and 10 Times Tables

2 Times Table

2	4	6	8	10	12	14	16	18	20
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5 Times Table

5	10	15	20	25	30	35	40	45	50
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Counting in 10s

10	20	30	40	50	60	70	80	90	100
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