

In this unit we will ...

- Recognise when groups are equal and when they are not
- Learn the 3, 4 and 8 times-tables
- Find a simple remainder when a number is divided
- Use a bar model to solve multiplication and division problems

## Year 3 Multiplication and Division

### National Curriculum Link – Year 3 multiplication and division:

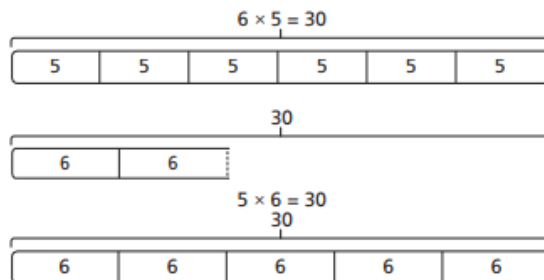
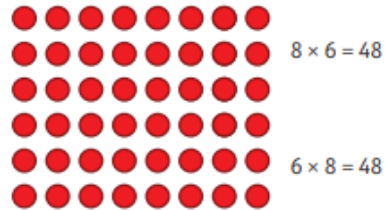
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

### How does this unit build on prior learning?

This unit builds on children's work in Year 2, where multiplication and division are introduced and equal and unequal groups are explored. It also builds on equal sharing and equal grouping. This unit provides essential preparation for beginning to multiply and divide 2-digit numbers by 1-digit numbers in the spring term, and also for working with fractions. Knowledge of times-table facts is also essential.

Before they start this unit, it is expected that children:

- know what it means when groups are equal and not equal
- know that multiplication can be seen as repeated addition and division as repeated subtraction
- know that an array shows two multiplications, such as  $5 \times 4 = 4 \times 5$ .

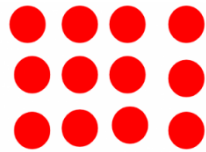


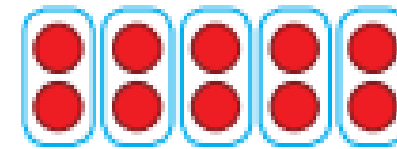
$1 \times 3 = 3$
$2 \times 3 = 6$
$3 \times 3 = 9$
$4 \times 3 = 12$
$5 \times 3 = 15$
$6 \times 3 = 18$
$7 \times 3 = 21$
$8 \times 3 = 24$
$9 \times 3 = 27$
$10 \times 3 = 30$
$11 \times 3 = 33$
$12 \times 3 = 36$

$1 \times 4 = 4$
$2 \times 4 = 8$
$3 \times 4 = 12$
$4 \times 4 = 16$
$5 \times 4 = 20$
$6 \times 4 = 24$
$7 \times 4 = 28$
$8 \times 4 = 32$
$9 \times 4 = 36$
$10 \times 4 = 40$
$11 \times 4 = 44$
$12 \times 4 = 48$

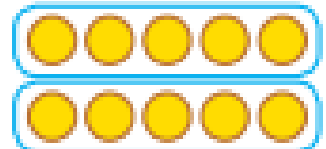
$1 \times 8 = 8$
$2 \times 8 = 16$
$3 \times 8 = 24$
$4 \times 8 = 32$
$5 \times 8 = 40$
$6 \times 8 = 48$
$7 \times 8 = 56$
$8 \times 8 = 64$
$9 \times 8 = 72$
$10 \times 8 = 80$
$11 \times 8 = 88$
$12 \times 8 = 96$

### Key Vocabulary

Equal groups	The same size
Multiply	To add equal groups
Divide	Sharing equal groups
Array	
Repeated addition	$3 + 3 + 3 + 3 = 12$
Multiplication sentence	$4 \times 3 = 12$
Division sentence	$12 \div 4 = 3$



5 groups of 2  
 $5 \times 2 = 10$



2 groups of 5  
 $2 \times 5 = 10$

Maths at Alice Ingham

