In this unit we will ..
Compare multiplication and division statements using inequality signs
Use known multiplication facts to solve other multiplication problems
Find multiplication and division fact families Learn to multiply and divide by partitioning
Solve mixed multiplication and division problems including multi-step problems

## How does this unit build on prior learning?

In this unit children develop their understanding of the multiplicative properties of numbers. This unit follows their learning about multiplication and division and precedes their work on money.

Before they start this unit it is expected that children:

- are familiar with different concrete and visual representations for multiplying by $2,3,4,5$ and 10
- can share and group numbers that occur in the $2,3,4,5$ and 10 timestables, making links between the 2 and 4 times-tables and the 4 and 8 times-tables
- can solve problems involving multiplication and division
- can solve division problems leading to remainders.

Year 3
Multiplication and Division
National Curriculum Link - Year 3 multiplication and division:

- 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.
- 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 multiplication and division facts for multiplication tables up to $12 \times 12$ ( 3,4 and 8)
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.

Key Vocabulary

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| :--- | :--- |
| multiplication | adding the same number together a number <br> of times |
| division | putting a group of things into equal parts |
| compare | finding the difference between numbers |
| remainder | what's left over |
| share | equal amounts are given out to different <br> parties |
| group | put equal amounts into a party |
| multi-step | more than one step |

$$
4 \times 23=?
$$


$29 \div 2=14$ remainder 1

| $1 \times 3=3$ | $1 \times 4=4$ | $1 \times 8=8$ |
| :---: | :---: | :---: |
| $2 \times 3=6$ | $2 \times 4=8$ | $2 \times 8=16$ |
| $3 \times 3=9$ | $3 \times 4=12$ | $3 \times 8=24$ |
| $4 \times 3=12$ | $4 \times 4=16$ | $4 \times 8=32$ |
| $5 \times 3=15$ | $5 \times 4=20$ | $5 \times 8=40$ |
| $6 \times 3=18$ | $6 \times 4=24$ | $6 \times 8=48$ |
| $7 \times 3=21$ | $7 \times 4=28$ | $7 \times 8=56$ |
| $8 \times 3=24$ | $8 \times 4=32$ | $8 \times 8=64$ |
| $9 \times 3=27$ | $9 \times 4=36$ | $9 \times 8=72$ |
| $10 \times 3=30$ | $10 \times 4=40$ | $10 \times 8=80$ |
| $11 \times 3=33$ | $11 \times 4=44$ | $11 \times 8=88$ |
| $12 \times 3=36$ | $12 \times 4=48$ | $12 \times 8=96$ |

I need to partition 42 differently to divide by 3.

$42=30+12$ $42 \div 3=14$

## Make 6 ones divided by 3 .



## Now make 6 tens divided by 3 .




