

Vocabulary

Multiplication

Multiplied (by)

Multiples

Groups of

Times

Repeated addition

New vocabulary

Product - Number created by multiplying.

Factors - A whole number which multiplies with another.

Multiplication Year 3 Knowledge organiser

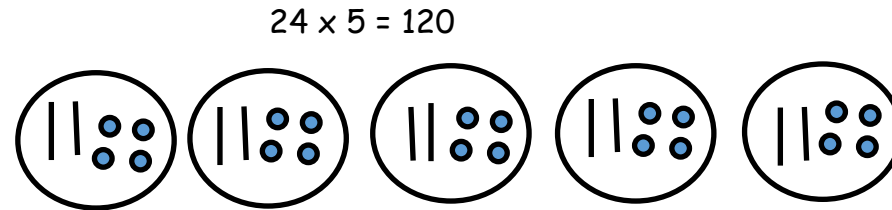
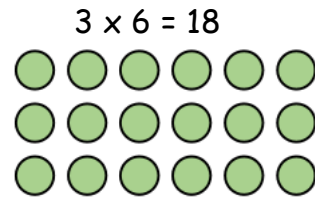
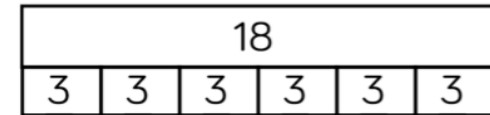
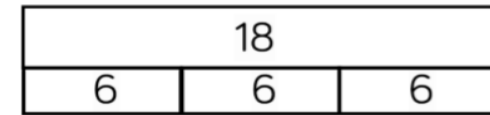
Concrete resources

Counters

Base 10 blocks

Multiplication square

Pictorial representation



Objectives

- Equal groups
- Multiply by 3
- 3 times table
- Multiply by 4
- 4 times table
- Multiply by 8
- 8 times table
- Comparing statements
- Multiply 2-digit by 1-digit numbers
- Scaling
- How many ways?

Abstract representation

Short column method

$$\begin{array}{r}
 \text{H T O} \\
 35 \\
 \times \quad 3 \\
 \hline
 105 \\
 \hline
 \end{array}$$

Expanded column method

$$\begin{array}{r}
 \text{H T O} \\
 35 \\
 \times \quad 3 \\
 \hline
 105 \quad (5 \times 3) \\
 + \quad 90 \quad (30 \times 3) \\
 \hline
 105 \\
 \hline
 \end{array}$$

Prior learning

Use 2, 5 and 10 times tables and relating division facts.

Recognise equal groups and represent this using arrays.

Understand the meaning of the symbol "x" and use it to develop number sentences