

Year 3 & 4: Multiplication & Division 1

Key Vocabulary

multiply
times
divide
share
groups of
lots of
multiple
factor
factor pairs
commutative
product
array
fact families
partition
inverse

Stem Sentences

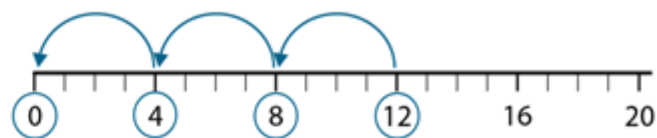
There are ____ equal groups of ____.
Altogether there is ____.

There are ____ groups with ____ in each group.
Altogether there is ____.

The product of ____ and zero is zero.

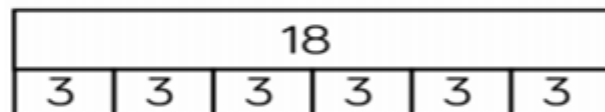
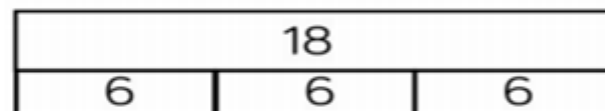
The product of ____ and one is ____.

Using a Number Line



$$\begin{aligned} 0 \times 4 &= 0 & 4 \times 0 &= 0 \\ 1 \times 4 &= 4 & 4 \times 1 &= 4 \\ 2 \times 4 &= 8 & 4 \times 2 &= 8 \\ 3 \times 4 &= 12 & 4 \times 3 &= 12 \end{aligned}$$

Using a Bar Model



12 times table

$$\begin{aligned} 1 \times 12 &= 12 \\ 2 \times 12 &= 24 \\ 3 \times 12 &= 36 \\ 4 \times 12 &= 48 \\ 5 \times 12 &= 60 \\ 6 \times 12 &= 72 \\ 7 \times 12 &= 84 \\ 8 \times 12 &= 96 \\ 9 \times 12 &= 108 \\ 10 \times 12 &= 120 \\ 11 \times 12 &= 132 \\ 12 \times 12 &= 144 \end{aligned}$$

7 times table

$$\begin{aligned} 1 \times 7 &= 7 \\ 2 \times 7 &= 14 \\ 3 \times 7 &= 21 \\ 4 \times 7 &= 28 \\ 5 \times 7 &= 35 \\ 6 \times 7 &= 42 \\ 7 \times 7 &= 49 \\ 8 \times 7 &= 56 \\ 9 \times 7 &= 63 \\ 10 \times 7 &= 70 \\ 11 \times 7 &= 77 \\ 12 \times 7 &= 84 \end{aligned}$$

Dividing any number by 1, 10 or 100

Divide by 1: the answer is the same as the number you are dividing by.

Divide by 10: move all digits one place to the right.



Divide by 100: move all digits two places to the right.

Multiplying any number by 0

When any number is multiplied by 0 the answer is 0.

$$\begin{aligned} 5 \times 0 &= 0 \\ 0 + 0 + 0 + 0 + 0 &= 0 \end{aligned}$$

Multiplying any number by 1, 10 or 100

Multiply by 1: the answer is the same as the number you are multiplying by.

Multiply by 10: move all digits one place to the left.



Multiply by 100: move all digits two places to the left.