## twinkl

planit

## Maths

## Multiplication and Division

## Need a coherently planned sequence of lessons to complement this resource?



See our Multiplication and Division Steps to Progression document.

Twinkl Planlt is our award-winning scheme of work with over 4000 resources.

## Multiplying by 10



## Aim

- To recall and use multiplication facts for the 10 times table.


## Success Criteria

- I can count in 10s.
- I can spot patterns within multiples of 10.
- I can recall multiplication facts up to $12 \times 10$.

Lets practise counting in 10s, forwards and backwards.


Lets practise counting in 10s, forwards and backwards.


Lets practise counting in 10s, forwards and backwards.


## Remember It

## Lets practise counting in 10s, forwards and backwards.



## Pencil Packets

## Pencils are sold in packets of 10.

The customer has bought 0 packets of pencils. How many pencils have they bought?

There are 0 packets of pencils.
0 is a factor.
10 is a factor.
The product of 0 and 10 is 0 .
$0 \times 10=0$
There are 0 pencils.


The customer has bought 1 packet of pencils. How many pencils have they bought?

There is 1 packet of pencils.
1 is a factor.
10 is a factor.
The product of 1 and 10 is 10 .
$1 \times 10=10$
There are 10 pencils.


The customer has bought 2 packets of pencils. How many pencils have they bought?

There are 2 packets of pencils.
2 is a factor.
10 is a factor.
The product of 2 and 10 is 20 .
$2 \times 10=20$
There are 20 pencils.


What is the product of 2 and $10 ?$


The customer has bought 3 packets of pencils.
What are the 2 factors and the product?
There are 3 packets of pencils.
3 is a factor.
10 is a factor.
The product of 3 and 10 is 30 .
$3 \times 10=30$
There are 30 pencils.

The customer has bought 4 packets of pencils.
Write the calculation to show this.
There are 4 packets of pencils.
4 is a factor.
10 is a factor.
The product of 4 and 10 is 40 .
$4 \times 10=40$
There are 40 pencils.


The customer has bought 5 packets of pencils.
There are 5 packets of pencils.
5 is a factor.
10 is a factor.
The product of 5 and 10 is 50 .
$5 \times 10=50$
There are 50 pencils.


How else could you write the calculation?


The customer has bought 6 packets of pencils.
There are 6 packets of pencils. 6 is a factor.
10 is a factor.
The product of 6 and 10 is 60 .
$6 \times 10=60 \quad 60=6 \times 10$
$10 \times 6=60 \quad 60=10 \times 6$
There are 60 pencils.


Write at least 2 calculations to show this.


The customer has bought 7 packets of pencils.
Complete the sentences.
There are 7 packets of pencils.
_ is a factor. is a factor.
The product of __ and $\qquad$ is ._. $7 \times 10=70$ There are 70 pencils.


The customer has bought 8 packets of pencils.
Complete the sentences and calculations.
There are 8 packets of pencils.
_ is a factor.
is a factor.
The product of __ and __ is __.

$$
\sim^{\times}=
$$

There are __ pencils.


The customer has bought 9 packets of pencils.
There are 9 packets of pencils.
9 is a factor.
10 is a factor.
The product of 9 and 10 is 90 .
$9 \times 10=90$
There are 90 pencils.
Write down the 2 factors, the product and the calculation.


The customer has bought 10 packets of pencils.
There are 10 packets of pencils. 10 is a factor.
10 is a factor.
The product of 10 and 10 is 100 .
$10 \times 10=100$
There are 100 pencils.
Write down the 2 factors, the product and the calculation.


The customer has bought 11 packets of pencils.
There are 11 packets of pencils.
11 is a factor.
10 is a factor.
The product of 11 and 10 is 110 .
$11 \times 10=110$
There are 110 pencils.
Write down the 2 factors, the product and the calculation.


The customer has bought 12 packets of pencils.
There are 12 packets of pencils.
12 is a factor.
10 is a factor.
The product of 12 and 10 is 120 .
$12 \times 10=120$
There are 120 pencils.
Write down the 2 factors, the product and the calculation.


|  | Number of Packets of Pencils | Number of Pencils |
| :---: | :---: | :---: |
| $0 \times 10=0$ | 0 | 0 |
| $1 \times 10=10$ | 1 | 10 |
| $2 \times 10=20$ | 2 | 20 |
| $3 \times 10=30$ | 4 | 30 |
| $4 \times 10=40$ | 5 | 40 |
| $5 \times 10=50$ | 6 | 50 |
| $6 \times 10=60$ | 7 | 70 |
| $7 \times 10=70$ | 8 | 80 |
| $8 \times 2=80$ | 9 | 90 |
| $9 \times 10=90$ | 10 | 100 |
| $10 \times 10=100$ | 11 | 110 |
| $11 \times 10=110$ | 12 | 120 |
| $12 \times 10=120$ |  |  |

If there are 40 pencils, how many packets are there?

If there are 6 packets of pencils, how many pencils are there?

What patterns can you see? Tell your partner. Have they found any different ones?


The first factors each increase by 1.

The second factor is 10 in every calculation.

The products all have 0 ones.

Working down the list, the products increase by 10 each time.

Let's use the patterns to find the missing numbers.

Working down the list, the products increase by 10 each time.

This means that working up the list, the products decrease by 10 each time.

$$
\begin{array}{ll}
0 \times 10=0 & \\
1 \times 10=10 & \\
2 \times 10=20 & 4 \times 10=5 \times 10-10 \\
3 \times 10=30 & \\
4 \times 10=40 & -10 \\
5 \times 10=50 & \\
6 \times 10=60 & 10 \times 10=9 \times 10+10 \\
7 \times 10=70 & \\
8 \times 10=80 & \\
9 \times 10=90 & \\
10 \times 10=100 & \\
11 \times 10=110 & \\
12 \times 10=120 &
\end{array}
$$

## Let's practise the ten times table.



Twelve tens are one hundred and twenty.

Let's use the tens times table to solve this problem.


Altogether, there are 50 eggs. How many boxes are there?

Represent this with a calculation.

$$
5 \times 10=50
$$

Use the greater than, less than and equals symbols to complete these problems.


$$
\begin{array}{ll}
7 \times 10 & 6 \times 10 \\
7 \times 10 & 8 \times 10-10 \\
7 \times 10 & 8 \times 10+10 \\
7 \times 10 & =10
\end{array}
$$

## 10 Times Table Race

Multiply the numbers on the track by 10 . Write them down as you go around. Use a timer to see how long it takes you to finish the race!


Multiply the numbers on the track by 10. Write them down as you go around. Use a timer to see how long it takes you to finish the race!


## Diving into Mastery

Dive in by completing your own activity!


## Aim

- To recall and use multiplication facts for the 5 times table.


## Success Criteria

- I can count in 5 s .
- I can spot patterns within multiples of 5 .
- I can recall multiplication facts up to $12 \times 5$.


