## DIVIDE BY 8

## GET READY

Here is an 8 by 2 array


1) Draw an 8 by 4 array
2) How many counters are there in your array?
3) Write 2 multiplication equations to match your array.
4) Write 2 division equations to match your array.

Here is an 8 by 2 array

$$
\begin{array}{ll}
2 \times 8=16 & 8 \times 2=16 \\
16 \div 8=2 & 16 \div 2=8
\end{array}
$$

1) Draw an 8 by 4 array

2) How many counters are there in your array? 32
3) Write 2 multiplication equations to match your array.

$$
4 \times 8=32 \quad 8 \times 4=32
$$

4) Write 2 division equations to match your array.

$$
32 \div 8=4 \quad 32 \div 4=8
$$

## LET'S LEARN

Here are 24 flowers.


How could we divide the flowers by 8 ?

We could share the flowers equally between 8 pots.

We could group the flowers into pots of 8

The flowers are shared equally between 8 pots. How many flowers will be in each pot?


There are 3 flowers in each pot.
$24 \div 8=3$

The flowers are grouped into pots of 8
How many pots can we fill?


There are 3 pots of 8
$24 \div 8=3$

## Shared into 8

$32 \div 8$
Grouped

48 children go camping.
Each tent holds 8 children. How many tents are needed?

1 tent $\rightarrow 8$ children


2 tents $\rightarrow 16$ children
3 tents $\rightarrow 24$ children
4 tents $\rightarrow 32$ children
5 tents $\rightarrow 40$ children
6 tents $\rightarrow 48$ children


How could you represent this problem?

48 children go camping.
There are 8 tents.
How many children will sleep in each tent?


I know that $6 \times 8=48$ so
$48 \div 8$ must be 6
48

How could yourepresent | 6 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 6 |
| p |  | problem?

## To divide by 8, take the number you are dividing and divide it by 2 four times.

$$
\begin{aligned}
& 80 \div 8=10 \\
& \text { Have a think } \\
& 80 \div 8=10 \\
& \text { Have a think } \\
& 80 \xrightarrow{\div 2} 40 \xrightarrow{\div 2} 20 \xrightarrow{\div 2} 10 \\
& \div 2
\end{aligned}
$$

I think you only need to divide by 2 three times.

## One of these numbers will not divide exactly by 8


$10 \times 8 \quad 2 \times 8$
fream (I)

## YOUR TURN

Have a go at the questions on the worksheet

