RECALL - HALVING
Half means to share into two groups. 5



There are 8 flowers. Colour in half.


$$
\text { Half } 4 \text { is }
$$

$\square$

$$
4 \div 2=
$$

$\qquad$
Half 14 is $\square$
$\div 2=$ $\qquad$
Half 16 is $\square$
$\qquad$ $\div 2=$ $\qquad$
Half 12 is $\square$
$12 \div 2=$ $\qquad$
Half 10 is $10 \div 2=$ $\qquad$
$\square$

"You can not half an odd number."
True or false?
Investigate.


# RECALL - HALVING 

There are 6 stars. Colour in half.


There are 8 flowers. Colour in half.


Half means to share into two groups.


Half these 2-digit numbers. Share the tens first and then the units.


Half 14 is

$14 \div 2=7$

Half 16 is

$16 \div 2=8$

$4 \div 2=2$

Half 10 is $10 \div 2=5$

Half 12 is

$12 \div 2=6$

$$
16 \div 2=8
$$



## MODELLED EXAMPLE

There are 48 sheep that need to be shared equally between 2 farmers.


How many sheep does each farmer have?

$$
48 \div 2=\square
$$

Half of 48 is $\qquad$

Act out the problems with equipment.

## Working it out - counters

First, make 48 on a place value mat. You will need 4 tens and 8 ones.


Second, divide the 4 tens into 2 equal group. This will make two groups of 20.

Then, divide the 8 units into 2 equal groups. This will make 2 groups of 4 .


$$
48 \div 2=24
$$

Half of 48 is 24 .

## INTELLIGENT PRACTICE



## 10 <br> 1

Use the place value mat and counters to half these numbers.

$$
\begin{aligned}
& 20 \div 2=\square \\
& 22 \div 2=\square \\
& 24 \div 2=\square \\
& 26 \div 2=\square \\
& 28 \div 2=\square
\end{aligned}
$$



## INTELLIGENT PRACTICE



## 10

Use the place value mat and counters to half these numbers.

$$
\begin{aligned}
& 20 \div 2=10 \\
& 22 \div 2=11 \\
& 24 \div 2=12 \\
& 26 \div 2=13 \\
& 28 \div 2=14
\end{aligned}
$$



| You will need to <br> exchange a ten counter |
| ---: |
| for ten ones to solve these. |
| $18 \div 2=9$ |
| $36 \div 2=18$ |
| $52 \div 2=26$ |
| $78 \div 2=39$ |
| $90 \div 2=45$ |
| Explain how you solved <br> questions in Chilli 2 and 3. |

## DIVE DEEPER

1 Peter and Tom have 26 sheep between them. They need to share them equally. How many do they get each?


Make 26 on your board and share into two. Draw it on your board.


$$
40 \div 2=
$$

Each pack of Fruit Pastilles has 28 sweets and I half them.

$\div 2=$

$$
\div 2=
$$

$\square$


First I make 28 using tens and $\qquad$ ones.
Next I share them into $\qquad$ groups.

Half of 28 is


46 frogs swim in a lake.
Half of them jump onto lily pads.


How many frogs are on lily pads? $\square$

$$
2 \div 2=
$$

$\qquad$
$\qquad$


$$
\begin{aligned}
& 60 \div 2= \\
& 6 \div 2= \\
& 66 \div 2=\square
\end{aligned}
$$

Work out the division calculations.

$$
\div 2=10
$$

$$
\div 2=4
$$

$\qquad$ $\div 2=$ $\square$


Explain how you worked these out.
$\div 2=$
$\qquad$

## DIVE DEEPER

Write the number sentence. $46 \div 2=23$

1 Peter and Tom have 26 sheep between them.
They need to share them equally.
How many do they get each?

## 13

Make 26 on your board and share into two. Draw it on your board.


Each pack of Fruit Pastilles has 28 sweets and I half them.

Work out the division calculations.

$$
\begin{aligned}
& 60 \div 2=30 \\
& 6 \div 2=3 \\
& 66 \div 2=33
\end{aligned}
$$



$$
40 \div 2=20
$$

$$
2 \div 2=1
$$

$$
42 \div 2=
$$

```
                        21
```

$20 \div 2=10$
$8 \div 2=4$
$28 \div 2=$ 14


Half of them jump onto lily pads.


How many frogs are on lily pads?
First I make 28 using 2 tens and 8 ones. Next I share them into 2 groups.

Half of 28 is 14 .
46 frogs swim in a lake.

Explain how you worked these out.

## DIVE DEEPER 2

1 Eva uses a place value grid to solve $66 \div 3$


Use Eva's method to calculate:

$$
69 \div 3
$$

$$
96 \div 3
$$

$$
86 \div 2
$$

Teddy answers the question $44 \div 4$ using place value counters.


Is he correct?
Explain your reasoning.

Mrs Turner has 86 tennis balls. She thinks that she can give eight classes 11 tennis balls each. Is she correct? Can you show me how you have worked this out?

## DIVE DEEPER 2

1 Eva uses a place value grid to solve $66 \div 3$


Use Eva's method to calculate:

$$
69 \div 3
$$

$$
96 \div 3
$$

$86 \div 2$

$$
\begin{aligned}
& 69 \div 3=23 \\
& 96 \div 3=32 \\
& 86 \div 2=43
\end{aligned}
$$

Teddy answers the question $44 \div 4$ using place value counters.


Is he correct?
Explain your reasoning.

Teddy is incorrect because he has divided by 2 and not by 4.
The answer should be 11.

Mrs Turner has 86 tennis balls. She thinks that she can give eight classes 11 tennis balls each. Is she correct? Can you show me how you have worked this out?

Mrs Turner cannot give 11 tennis balls to each class.
She has two tennis balls less than she needs.
Each class would have 10 tennis balls and there would be 6 balls left over.

