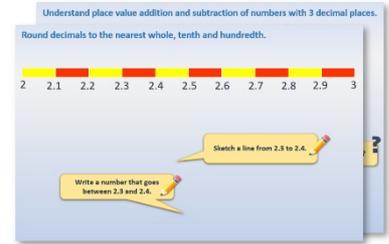


# Year 2: Week 2, Day 4

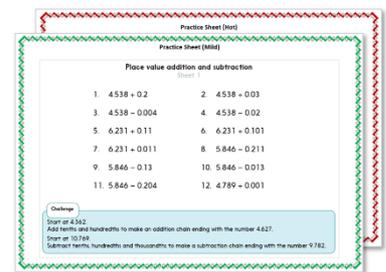
## Division

Each day covers one maths topic. It should take you about 1 hour or just a little more.

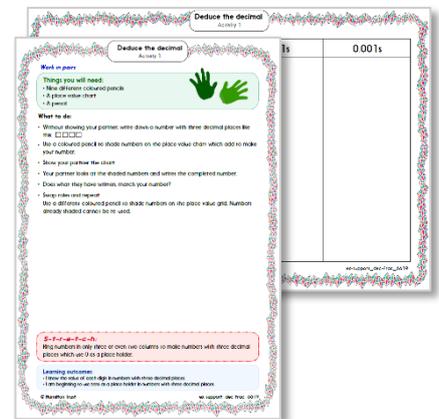
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



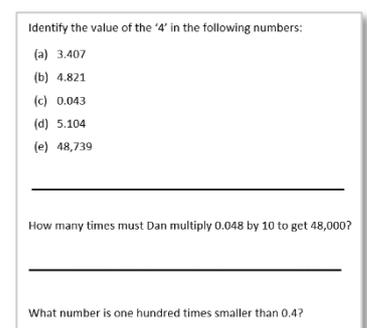
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



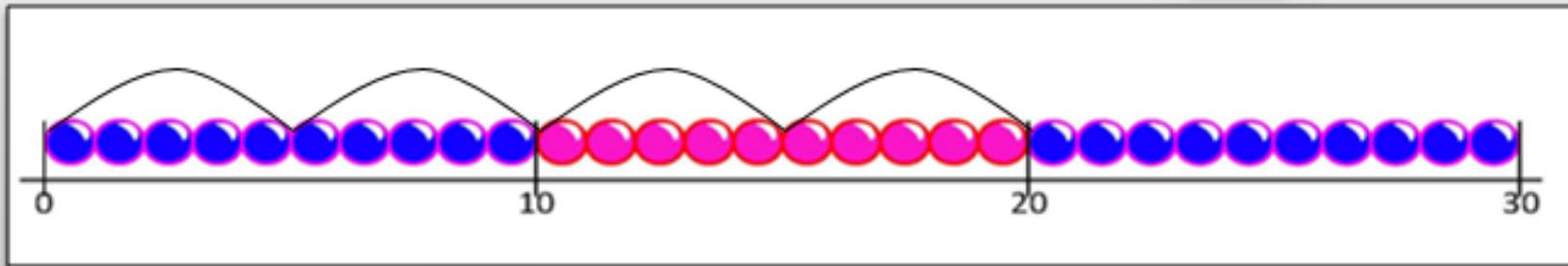
## Learning Reminders

Work out division using beaded lines; Understand division as the inverse of multiplication.

$20 \div 5 = \square$   
What does this number sentence ask us to do?



How many lots of 5 are in 20?  $\square \times 5 = 20$   
We can **start at 20 and jump back in 5s.**



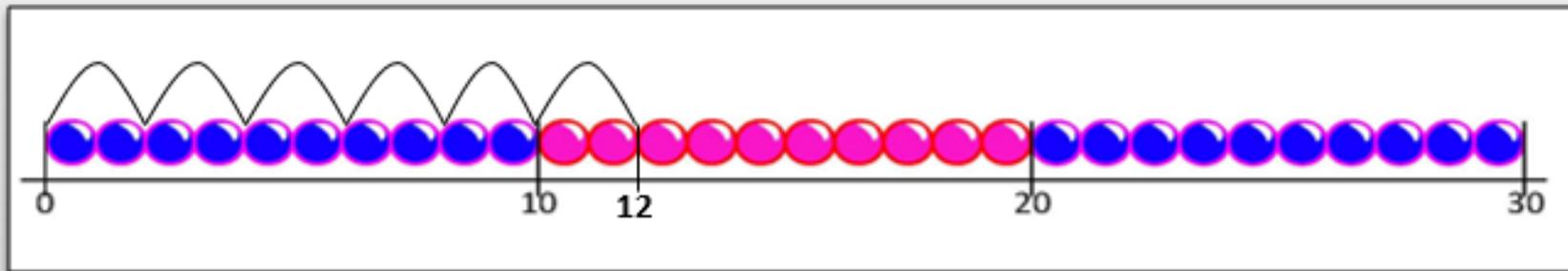
That's 4 jumps.  
 $20 \div 5 = 4$ .  
What would the matching multiplication look like?

$$4 \times 5 = 20$$

## Learning Reminders

Work out division using beaded lines; Understand division as the inverse of multiplication.

Let's try  $12 \div 2$ .  $\square \times 2 = 12$   
I start at the number to be divided then draw hops back along the line in groups of the smaller number until I can't make any more groups.

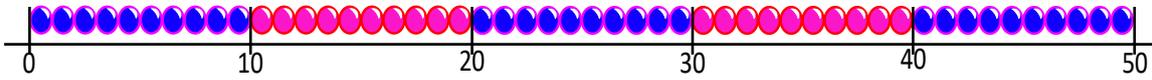


6 groups of 2.  
 $12 \div 2 = 6$

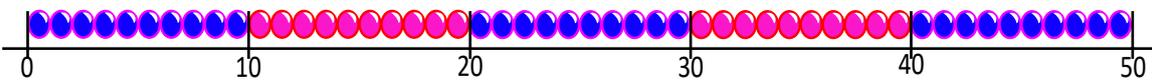
## Practice Sheet Mild

### Division on beaded lines

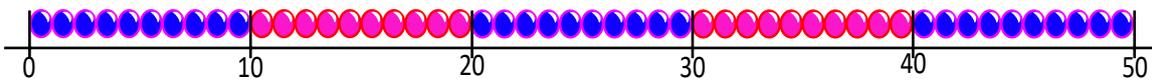
$15 \div 5 =$



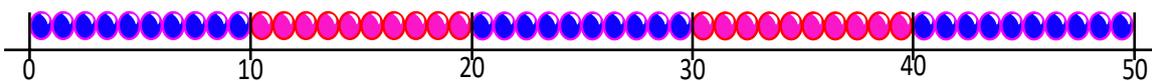
$16 \div 2 =$



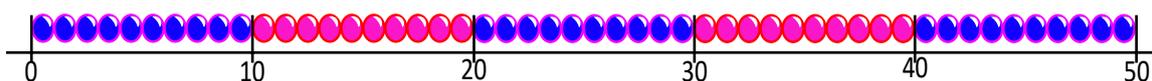
$40 \div 10 =$



$40 \div 5 =$



$45 \div 5 =$



#### Challenge

Now try to solve these calculations and write a matching multiplication for each:

$90 \div 10 =$

$55 \div 5 =$

$24 \div 2 =$

## Practice Sheet Hot

### More mystery numbers

Find the missing numbers.

1.  $\square \times 5 = 30$

2.  $10 \div 5 = \square$

3.  $\square \times 2 = 24$

4.  $20 \div 2 = \square$

5.  $\square \times 10 = 60$

6.  $\square \times 2 = 22$

7.  $\square \times 2 = 16$

8.  $\square \times 5 = 25$

9.  $30 \div 2 = \square$

10.  $\square \times 10 = 90$

11.  $70 \div 10 = \square \div 2$

12.  $45 \div 5 = 18 \div \square$

#### Challenge

Make up three more balancing problems like questions 11 and 12 for your partner to solve.

## Practice Sheet Answers

### Division on beaded lines (mild)

$$15 \div 5 = 3$$

$$16 \div 2 = 8$$

$$40 \div 10 = 4$$

$$40 \div 5 = 8$$

$$45 \div 5 = 9$$

### Challenge

$$90 \div 10 = 9$$

$$55 \div 5 = 11$$

$$24 \div 2 = 12$$

$$10 \times 9 = 90 \text{ or } 9 \times 10 = 90$$

$$11 \times 5 = 55 \text{ or } 5 \times 11 = 55$$

$$2 \times 12 = 24 \text{ or } 12 \times 2 = 24$$

### More mystery numbers (hot)

1.  $6 \times 5 = 30$
2.  $10 \div 5 = 2$
3.  $12 \times 2 = 24$
4.  $20 \div 2 = 10$
5.  $6 \times 10 = 60$
6.  $11 \times 2 = 22$
7.  $8 \times 2 = 16$
8.  $5 \times 5 = 25$
9.  $30 \div 2 = 15$
10.  $9 \times 10 = 90$
11.  $70 \div 10 = 14 \div 2$
12.  $45 \div 5 = 18 \div 2$

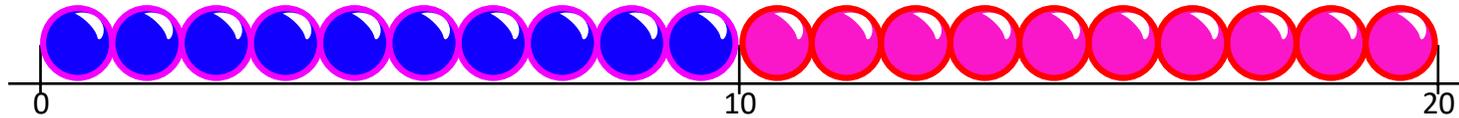
## A Bit Stuck? Ring the twos

*Work in pairs*

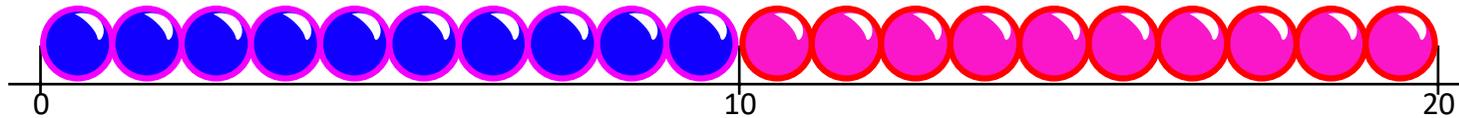
**What to do:**

Draw rings round groups of 2 beads to work out the answers to these questions:

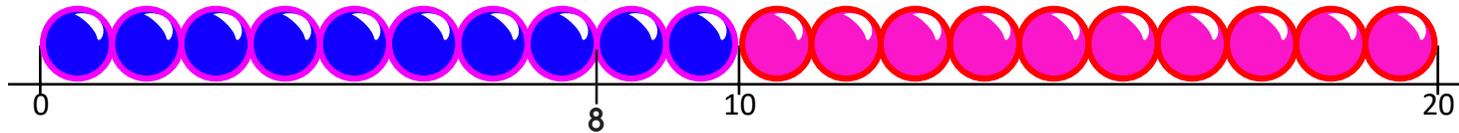
How many 2s are in 10?



How many 2s are in 20?



How many 2s are in 8?



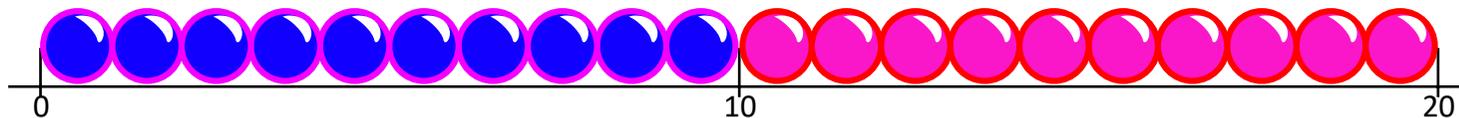
**Things you will need:**

- A pencil

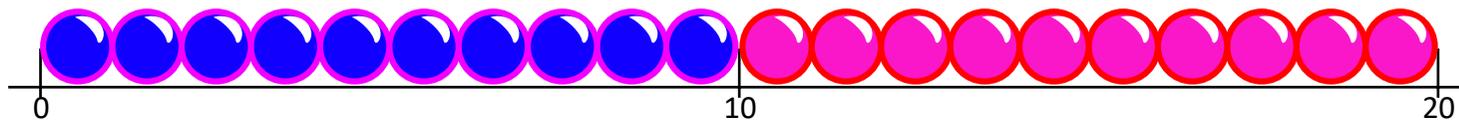


## A Bit Stuck? Ring the twos

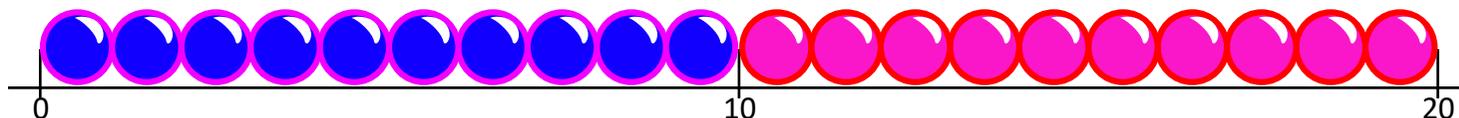
How many 2s are in 12?



How many 2s are in 16?



How many 2s are in 18?



### *S-t-r-e-t-c-h:*

Write multiplications to go with some of your answers.

### Learning outcomes:

- I can ring groups on a beaded line to find how many 2s are in a number.
- I am beginning to see the link between multiplication and division.

## Check your understanding

### Questions

How many hops of 5 in...

- (i) 20?
- (ii) 35?
- (iii) 50?

How many 2s in ...

- (i) 16?
- (ii) 20?
- (iii) 24?

---

Explain why  $20 \div 5 = \square$  can also be written as  $\square \times 5 = 20$ .

---

Write the missing numbers:

$\times 2 = 12$

$\times 2 = 20$

$\times 5 = 30$

$\times 10 = 60$

## Check your understanding

### Answers

How many hops of 5 in...

- (i) 20? 4
- (ii) 35? 7
- (iii) 50? 10

How many 2s in ...

- (i) 16? 8
- (ii) 20? 10
- (iii) 24? 12

---

Explain why  $20 \div 5 = \square$  can also be written as  $\square \times 5 = 20$ .

Each is asking how many groups (or 'lots') of 5 equal 20.

---

Write the missing numbers:

$$\square \times 2 = 12$$

$$\square \times 2 = 20$$

$$\square \times 5 = 30$$

$$\square \times 10 = 60$$

Children can count up in 2s, 5s or 10s to confirm the multiplication facts.