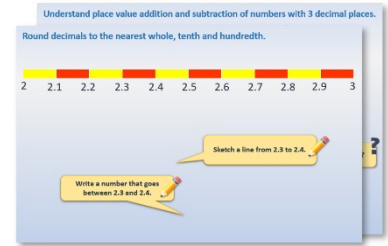


# Year 2: Week 2, Day 2

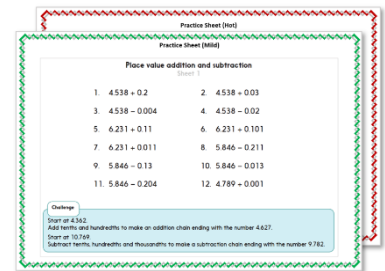
## Find fractions of amounts

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

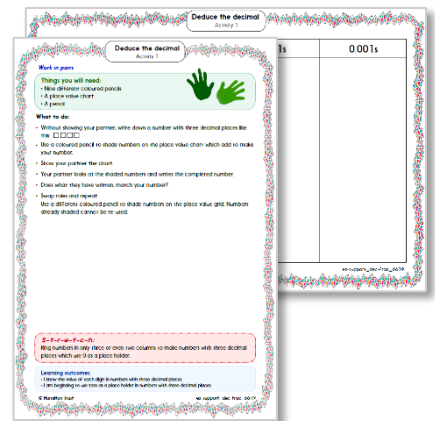
- Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



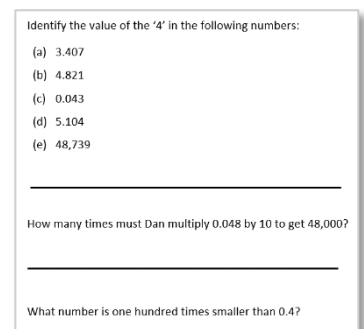
- Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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



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



## Learning Reminders

Find  $\frac{1}{4}$  of amounts by using number facts and sharing.



I have 4 cakes and 12 sweets. I want  $\frac{1}{4}$  of the sweets on each cake.

How many sweets will there be on each cake?

Half of 12 is 6 and half again is 3, so  $\frac{1}{4}$  of 12 is 3!

## Learning Reminders

Find  $\frac{1}{3}$  of amounts by using number facts and sharing.



This time I have 3 cakes. What fraction of the smarties will be on each cake?



I need to find  $\frac{1}{3}$  of 12. What number fact could help?

How many sweets will there be on each cake now?



$\frac{1}{3}$  of 12 is 4.

## Practice Sheet Mild

### Halving and quartering

Complete the table by finding half, then a quarter of each of the numbers.

	$\frac{1}{2}$	$\frac{1}{4}$
4		
8		
12		
16		
20		
24		
28		
32		
36		

#### Challenge

What do you notice about the numbers in the  $\frac{1}{2}$ s column? What number would come next? What about the  $\frac{1}{4}$ s column? How would this pattern continue?

## Practice Sheet Hot

### Finding fractions of numbers

Find the following:

$$\frac{1}{4} \text{ of } 16$$

$$\frac{1}{4} \text{ of } 8$$

$$\frac{1}{4} \text{ of } 32$$

$$\frac{1}{4} \text{ of } 28$$

$$\frac{1}{3} \text{ of } 12$$

$$\frac{1}{3} \text{ of } 6$$

$$\frac{1}{3} \text{ of } 9$$

$$\frac{1}{3} \text{ of } 21$$

$$\frac{1}{4} \text{ of } 20$$

$$\frac{1}{3} \text{ of } 24$$

$$\frac{1}{2} \text{ of } 22$$

$$\frac{1}{4} \text{ of } 24$$

$$\frac{1}{2} \text{ of } 16$$

$$\frac{1}{3} \text{ of } 15$$

$$\frac{1}{4} \text{ of } 36$$

$$\frac{1}{2} \text{ of } 26$$

$$\frac{1}{3} \text{ of } 27$$

$$\frac{1}{2} \text{ of } 24$$

$$\frac{1}{2} \text{ of } 32$$

$$\frac{1}{3} \text{ of } 18$$

#### Challenge

$\frac{1}{4}$  of a number is 10. What is the number?

$\frac{1}{3}$  of the number is 1. What is the number?

## Practice Sheets Answers

### Halving and quartering (mild)

	$\frac{1}{2}$	$\frac{1}{4}$
4	2	1
8	4	2
12	6	3
16	8	4
20	10	5
24	12	6
28	14	7
32	16	8
36	18	9

#### Challenge

What do you notice about the numbers in the  $\frac{1}{2}$  column? **Go up in 2s.**

What number would come next? **20**

What about the  $\frac{1}{4}$  column? **Go up consecutively.**

How would this pattern continue? **10, 11, 12, etc.**

### Finding fractions of numbers (hot)

$\frac{1}{4}$ of 16	4	$\frac{1}{2}$ of 22	11
$\frac{1}{4}$ of 8	2	$\frac{1}{4}$ of 24	6
$\frac{1}{4}$ of 32	8	$\frac{1}{2}$ of 16	8
$\frac{1}{4}$ of 28	7	$\frac{1}{3}$ of 15	5
$\frac{1}{3}$ of 12	4	$\frac{1}{4}$ of 36	9
$\frac{1}{3}$ of 6	2	$\frac{1}{2}$ of 26	13
$\frac{1}{3}$ of 9	3	$\frac{1}{3}$ of 27	9
$\frac{1}{3}$ of 21	7	$\frac{1}{2}$ of 24	12
$\frac{1}{4}$ of 20	5	$\frac{1}{2}$ of 32	16
$\frac{1}{3}$ of 24	8	$\frac{1}{3}$ of 18	6

#### Challenge

$\frac{1}{4}$  of 40 is 10

$\frac{1}{3}$  of 3 is 1

## A Bit Stuck? Fair cakes

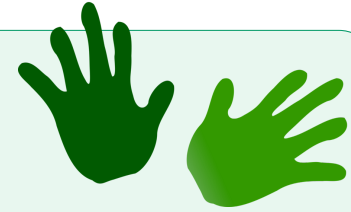
### Work in pairs

#### What to do:

- The twins have each made a cake. They are obsessed with fairness. They want the same number of chocolate buttons'. Write the missing numbers in the sentence.
- Shuffle the number cards and place face down. Turn the top card over. Take this number of chocolate buttons' (counters) and put half on each cake. Fill in a number sentence.
- Repeat for as many cards as you can.

#### Things you will need:

- Even 2 to 20 cards
- 20 counters
- A pencil



Half of	<input type="text"/>	is	<input type="text"/>
Half of	<input type="text"/>	is	<input type="text"/>
Half of	<input type="text"/>	is	<input type="text"/>
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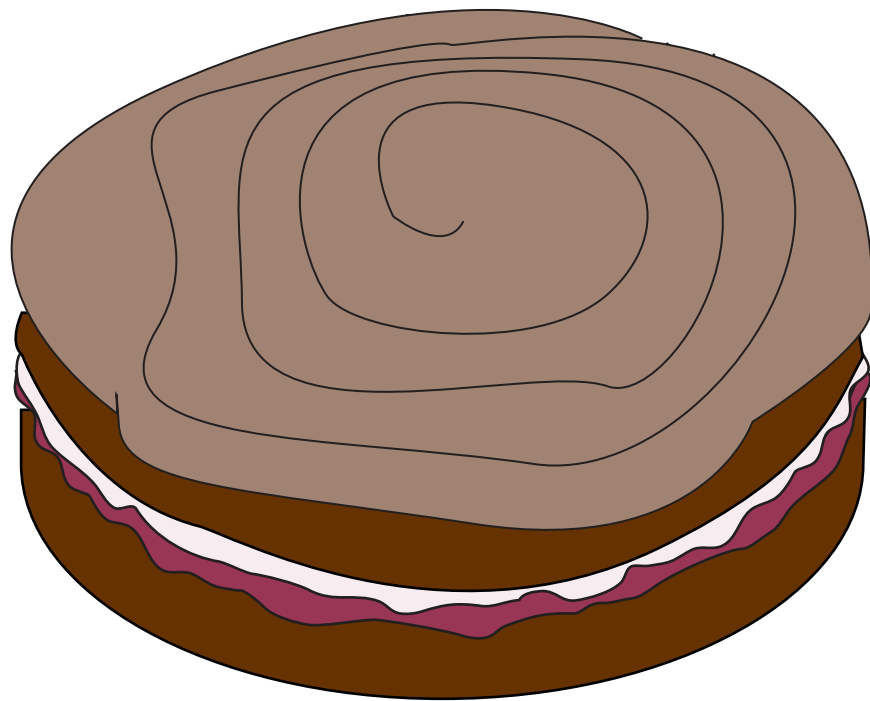
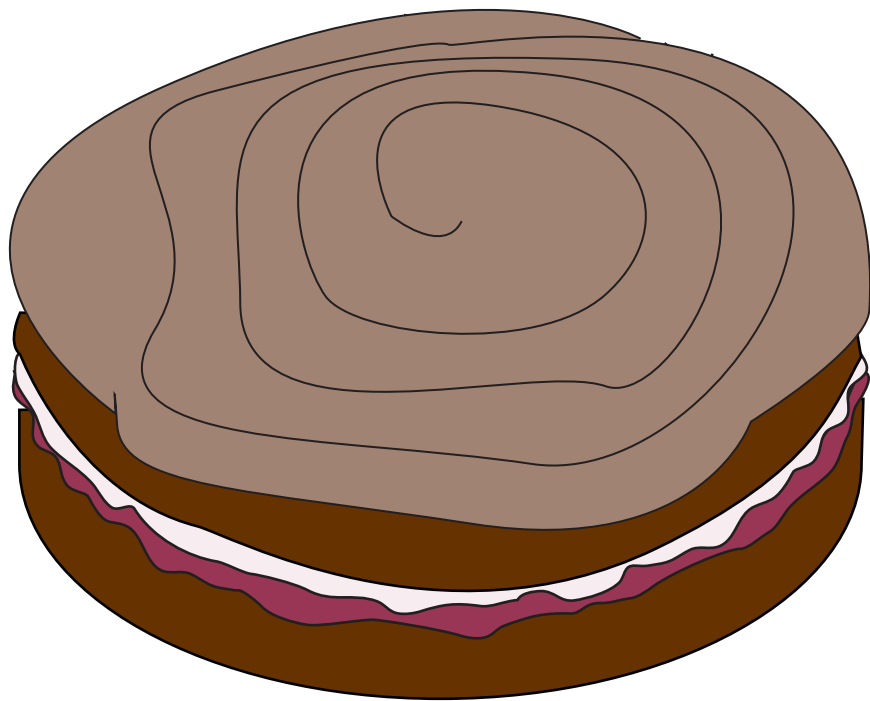
### *S-t-r-e-t-c-h:*

Write doubles facts to go with some of your halving facts, e.g. half of 10 is 5, so double 5 is 10.

### Learning outcomes:

- I can find half of even numbers up to 20.
- I am beginning to relate doubling and halving.

**A Bit Stuck?**  
**Fair cakes**





**2**

**4**

**6**

**8**

**10**

**12**

**14**

**16**

**18**

**20**

## Check your understanding Questions

Complete each sentence.

$\frac{1}{4}$  of 20 is \_\_\_\_\_

$\frac{1}{3}$  of 12 is \_\_\_\_\_

$\frac{1}{2}$  of 24 is \_\_\_\_\_

---

Look at this bar diagram. It shows that  $\frac{1}{4}$  of 12 is 3.

<b>12</b>			
3	3	3	3

Write a fraction sentence to match each bar diagram below:

<b>22</b>	
11	11

<b>15</b>		
5	5	5

<b>8</b>			
2	2	2	2

---

18 children are in a class and  $\frac{1}{3}$  are boys. How many are girls?

10 of the 15 children in a class are girls. What fraction are boys?

## Check your understanding

### Answers

Complete each sentence.

$\frac{1}{4}$  of 20 is 5

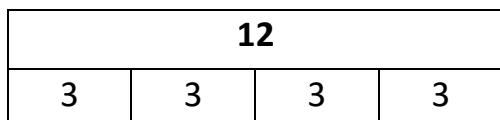
$\frac{1}{3}$  of 12 is 4

$\frac{1}{2}$  of 24 is 12

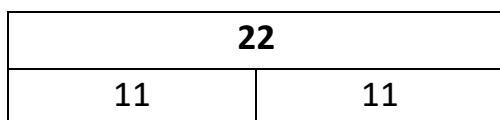
Some children may need a physical model to help solve these.

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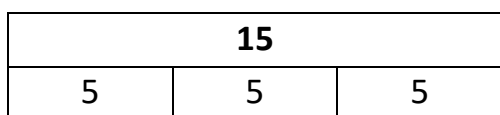
Look at this bar diagram. It shows that  $\frac{1}{4}$  of 12 is 3.



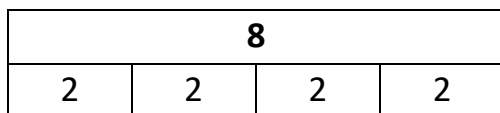
Write a fraction sentence to match each bar diagram below:



$\frac{1}{2}$  of 22 is 11



$\frac{1}{3}$  of 15 is 5



$\frac{1}{4}$  of 8 is 2

---

18 children are in a class and  $\frac{1}{3}$  are boys. How many are girls?

12 are girls. 6 are boys ( $\frac{1}{3}$ ). An answer of 6 suggests that the question hasn't been read carefully.

10 of the 15 children in a class are girls. What fraction are boys?

$\frac{5}{15}$  or  $\frac{1}{3}$  since 5 out of 15 are boys.