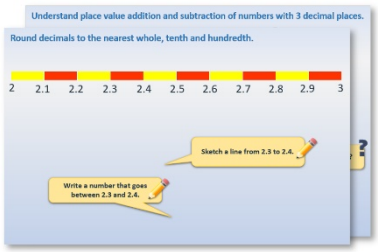
Year 2: Week 2, Day 2

Find fractions of amounts

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

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



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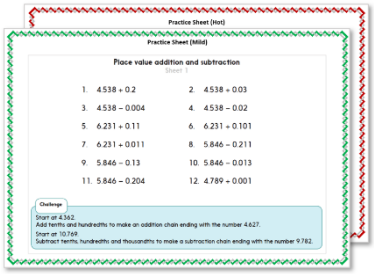
2. Tackle the questions on the **Practice Sheet**.
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.



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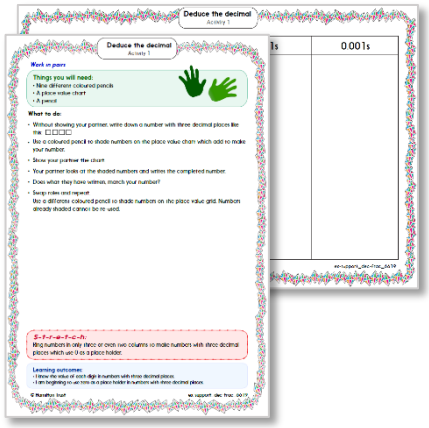
3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**



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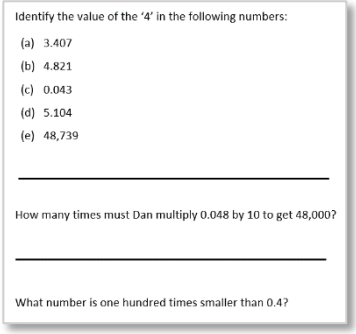
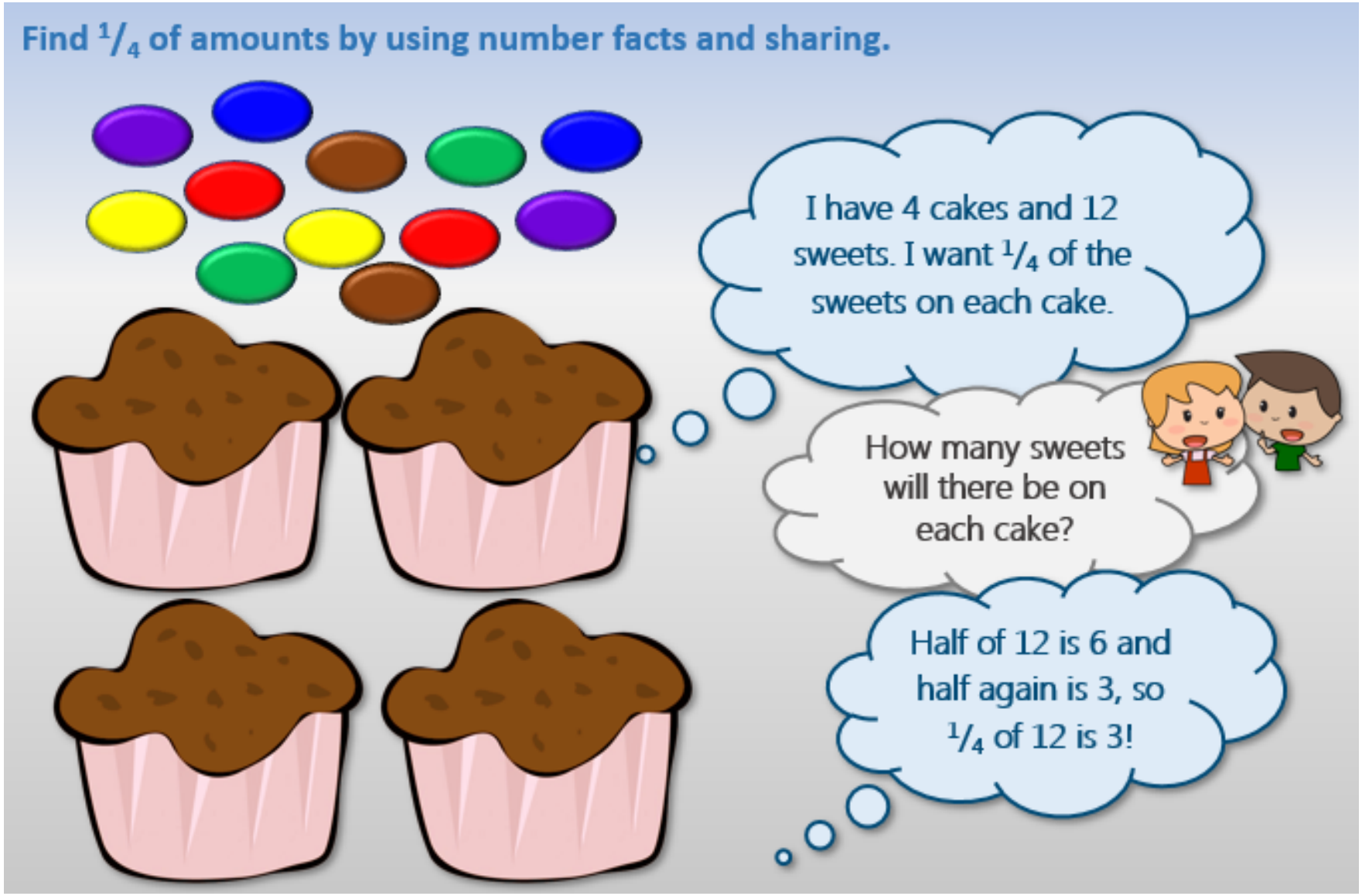
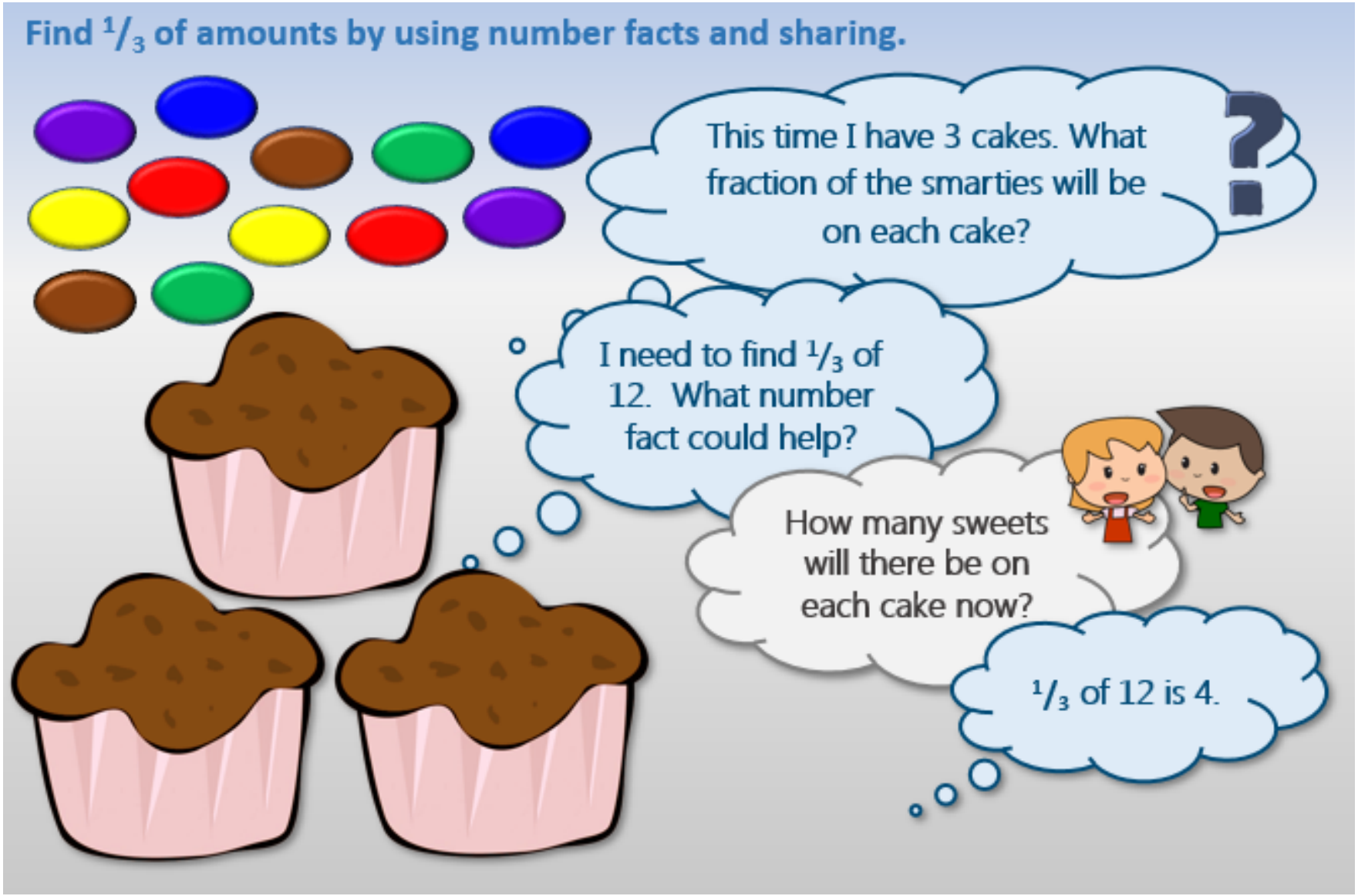
4. Have I mastered the topic? A few questions to **Check your understanding**.
   Fold the page to hide the answers!



Learning Reminders



Learning Reminders



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:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$\frac{1}{3}$ 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 $\frac{1}{2}$s column? Go up in 2s.
What number would come next? 20
What about the $\frac{1}{4}$s column? Go up consecutively.
How would this pattern continue? 10, 11, 12, etc.

Finding fractions of numbers (hot)

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

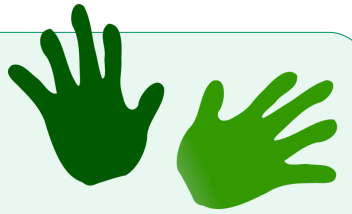
What to do:

- 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



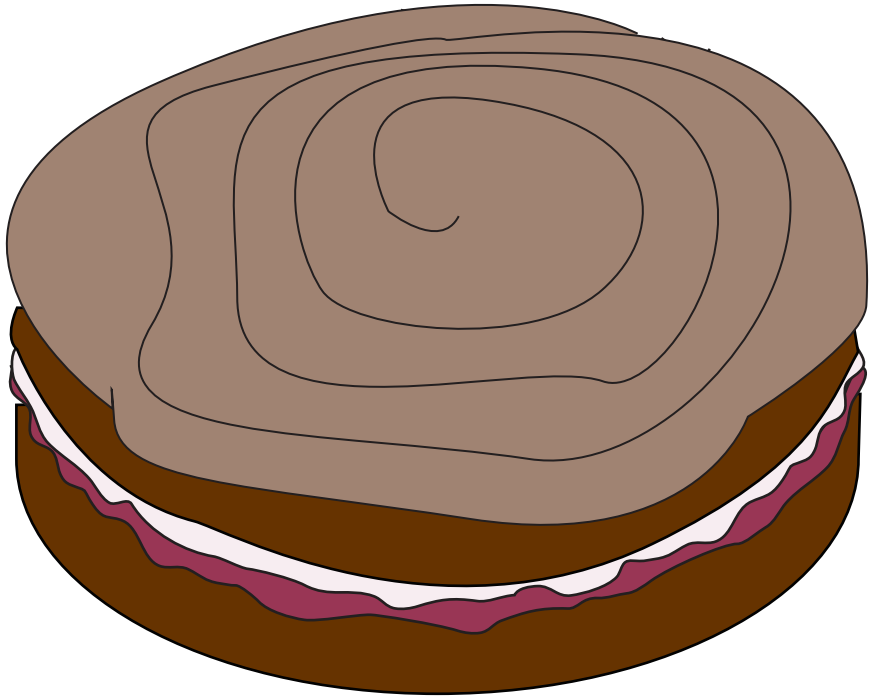
Half of		is	
Half of		is	
Half of		is	
Half of		is	
Half of		is	
Half of		is	
Half of		is	
Half of		is	
Half of		is	
Half of		is	

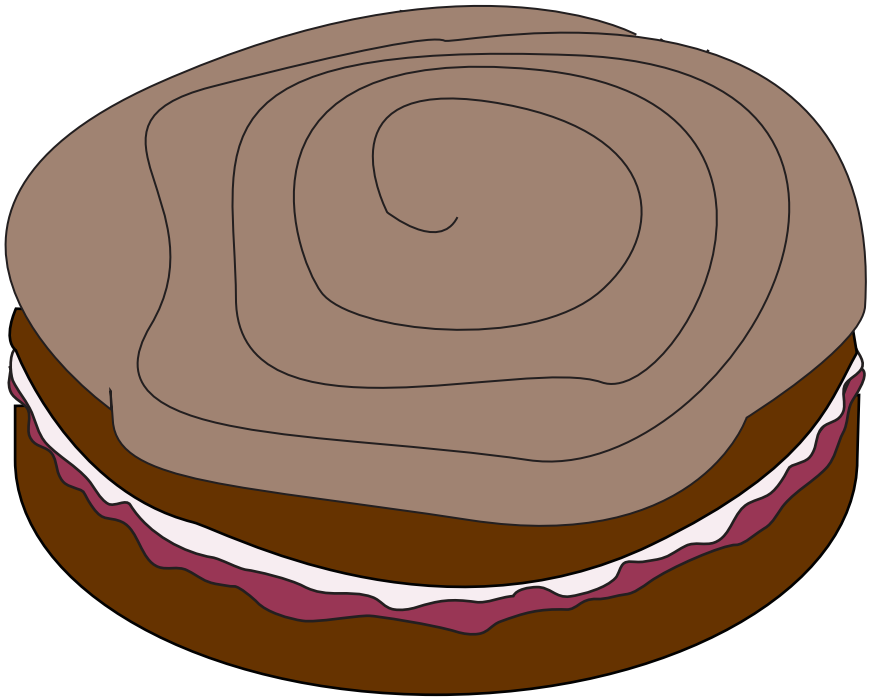
S-t-r-e-t-c-h:
Write doubles facts to go with some of your halving facts, e.g. half of 10 is 5, so double 5 is 10.

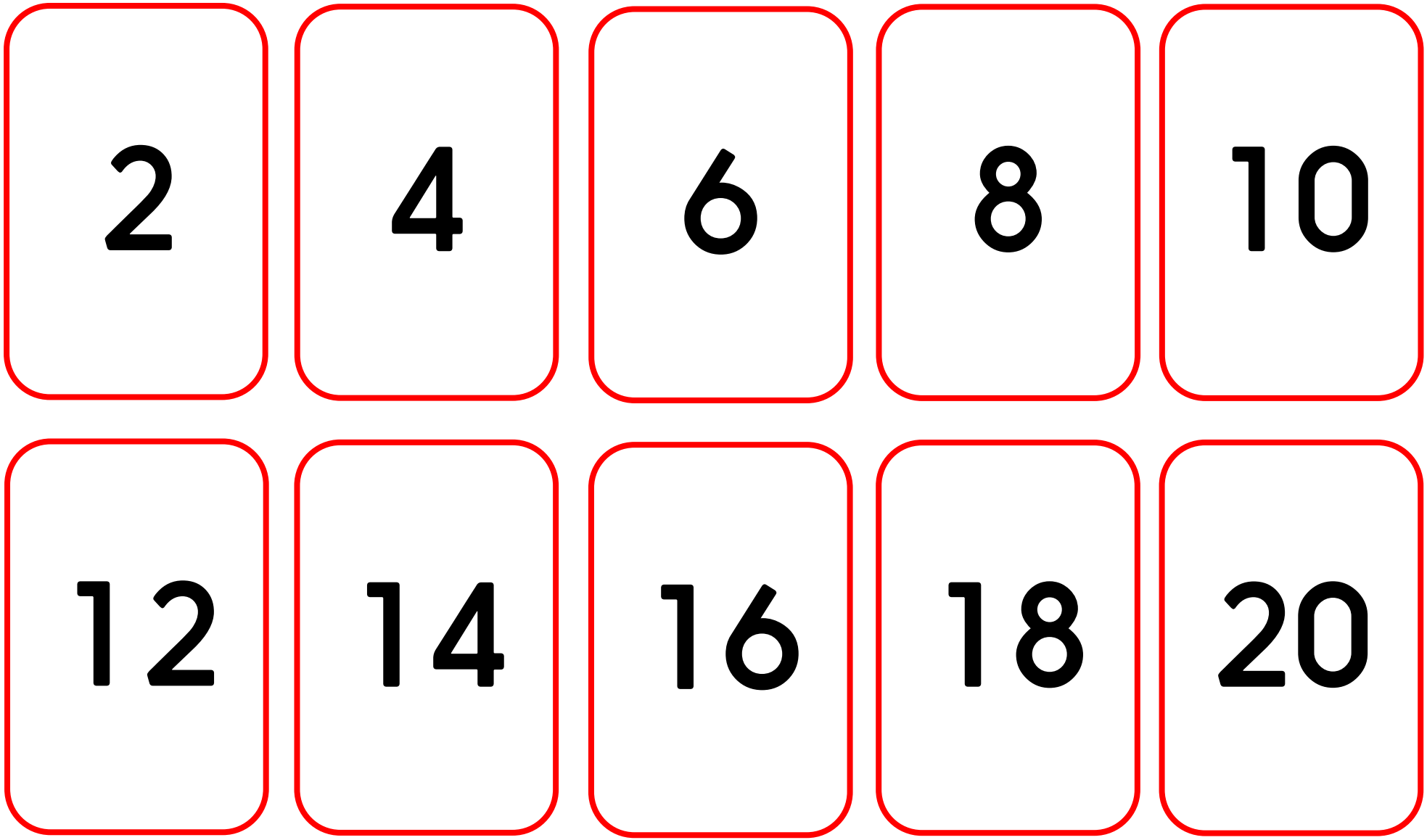
Learning outcomes:
- I can find half of even numbers up to 20.
- I am beginning to relate doubling and halving.

A Bit Stuck?

Fair cakes







Check your understanding

Questions

Complete each sentence.

$^1/_4$ of 20 is _____ $^1/_3$ of 12 is _____ $^1/_2$ of 24 is _____

Look at this bar diagram. It shows that $^1/_4$ of 12 is 3.

12			
3	3	3	3

Write a fraction sentence to match each bar diagram below:

22	
11	11

15		
5	5	5

8			
2	2	2	2

---

18 children are in a class and $^1/_3$ 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.

$^1/_4$ of 20 is 5 $^1/_3$ of 12 is 4 $^1/_2$ of 24 is 12

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

Look at this bar diagram. It shows that $^1/_4$ of 12 is 3.

12			
3	3	3	3

Write a fraction sentence to match each bar diagram below:

22	
11	11

$^1/_2$ of 22 is 11

15		
5	5	5

$^1/_3$ of 15 is 5

8			
2	2	2	2

$^1/_4$ of 8 is 2

---

18 children are in a class and $^1/_3$ are boys. How many are girls?

12 are girls. 6 are boys ($^1/_3$). 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?

$^5/_{15}$ or $^1/_3$ since 5 out of 15 are boys.