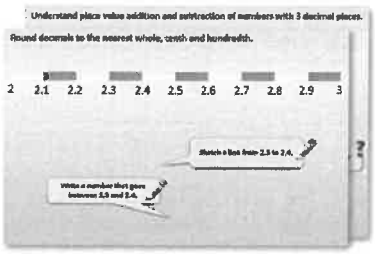
Year 5: Week 2, Day 1
Decimals: Multiply and divide by 10, 100 and 1000

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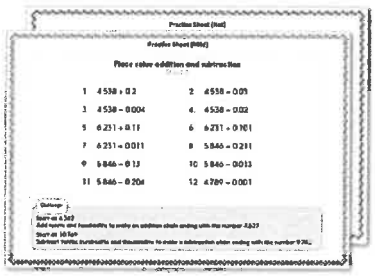
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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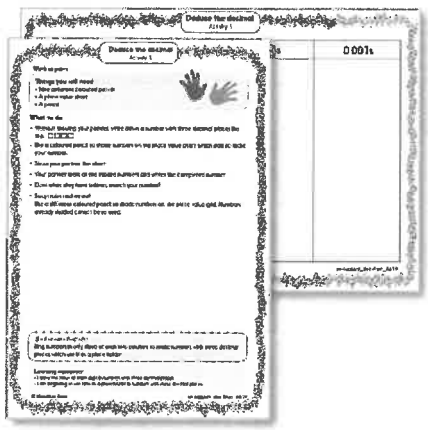
3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



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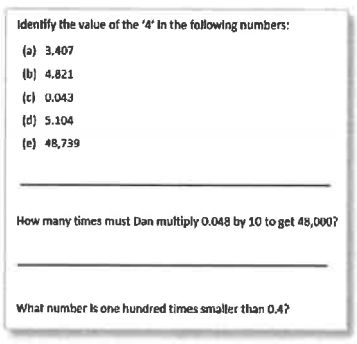
4. Have I mastered the topic? A few questions to **Check your understanding.** Fold the page to hide the answers!



Learning Reminders

Multiply and divide by 10, 100 and 1000.

10,000s	1000s	100s	10s	1s	0.1s $^1/_{10}$s	0.01s $^1/_{100}$s
		2	3	5		
				2	3	5

If this was a measurement in centimetres, how would we write it in metres?

Note that the digits move and the decimal point does NOT move.

235 ÷ 100 = 2.35

When we divide by 100, the digits all move together, two place value columns to the right.

Multiply and divide by 10, 100 and 1000.

10,000s	1000s	100s	10s	1s	0.1s $^1/_{10}$s	0.01s $^1/_{100}$s
		4	2	9	9	
	4	2	9	9		

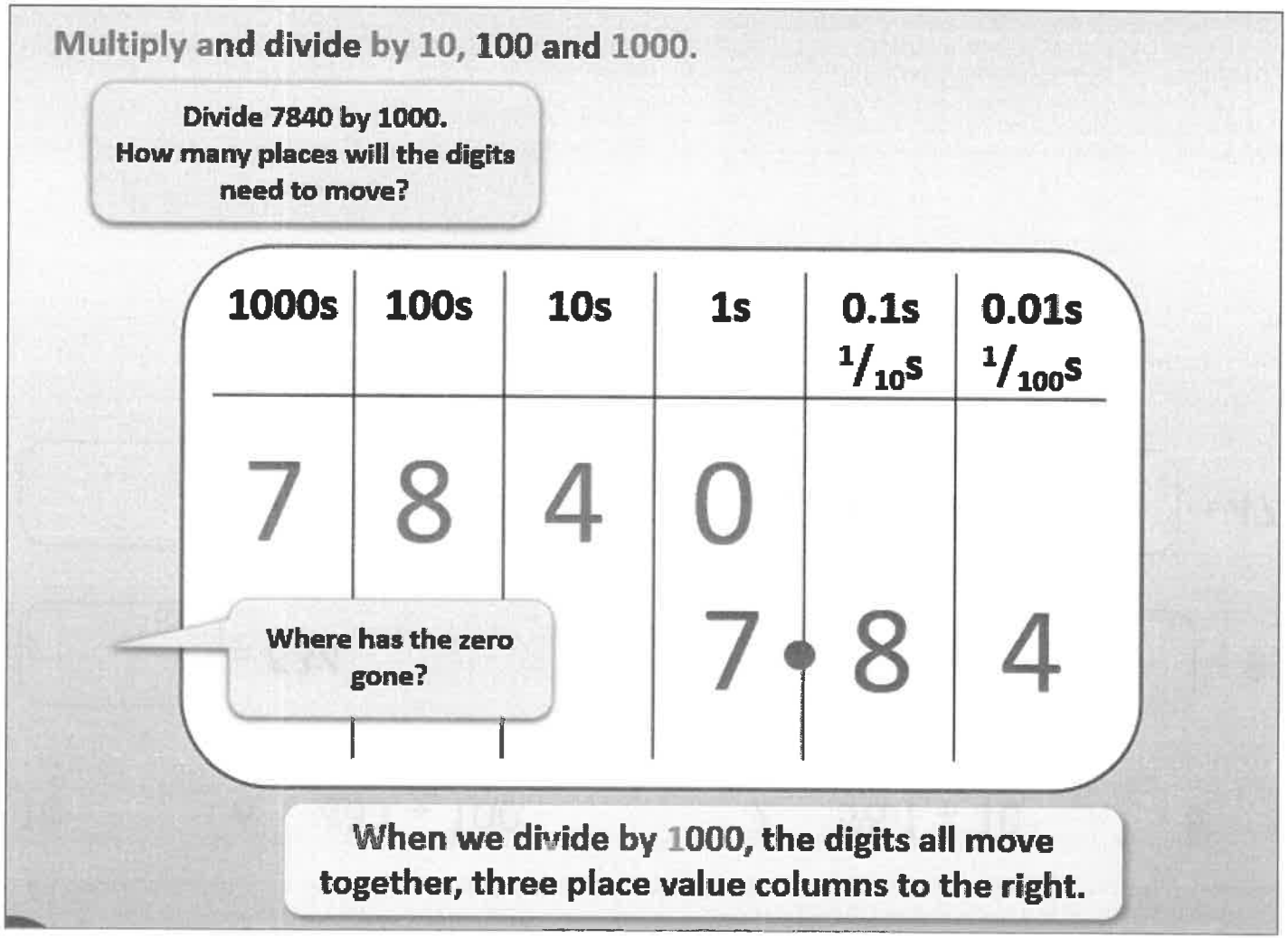
What if this was a distance in centimetres and I wanted to write it in millimetres?

429.9 x 10 = 4299

What did you need to do?

When we multiply by 10, the digits all move together, one place value column to the left.

Learning Reminders



When we multiply by 10, 100 and 1000, the digits all move together, one, two, or three place value columns to the left.

When we divide by 10, 100 and 1000, the digits all move together, one, two, or three place value columns to the right.

Practice Sheet Mild

Multiplying and dividing by 10 and 100

1. 34.6×10
2. 34.6×100
3. 6.74×10
4. 6.74×100
5. $483 \div 10$
6. $483 \div 100$
7. $56.1 \div 10$
8. 56.1×100
9. $83.4 \times \square = 834$
10. $83.4 \div \square = 8.34$
11. $47.2 \div \square = 4.72$
12. $47.2 \times \square = 4720$

Practice Sheet Hot

Multiplying and dividing by 10, 100 and 1000

1. 456.8 × 10
2. 4568 ÷ 10
3. 2.76 × 10
4. 843 ÷ 100
5. 47.3 × 100
6. 783 ÷ 100
7. 45.62 × 100
8. 783.4 ÷ 10
9. 45.74 × 1000
10. 3620 ÷ 1000
11. 348.2 × ☐ = 3482
12. 34,820 ÷ ☐ = 34.82

Challenge

Complete the following calculations.

78.43 × ☐ = 7843

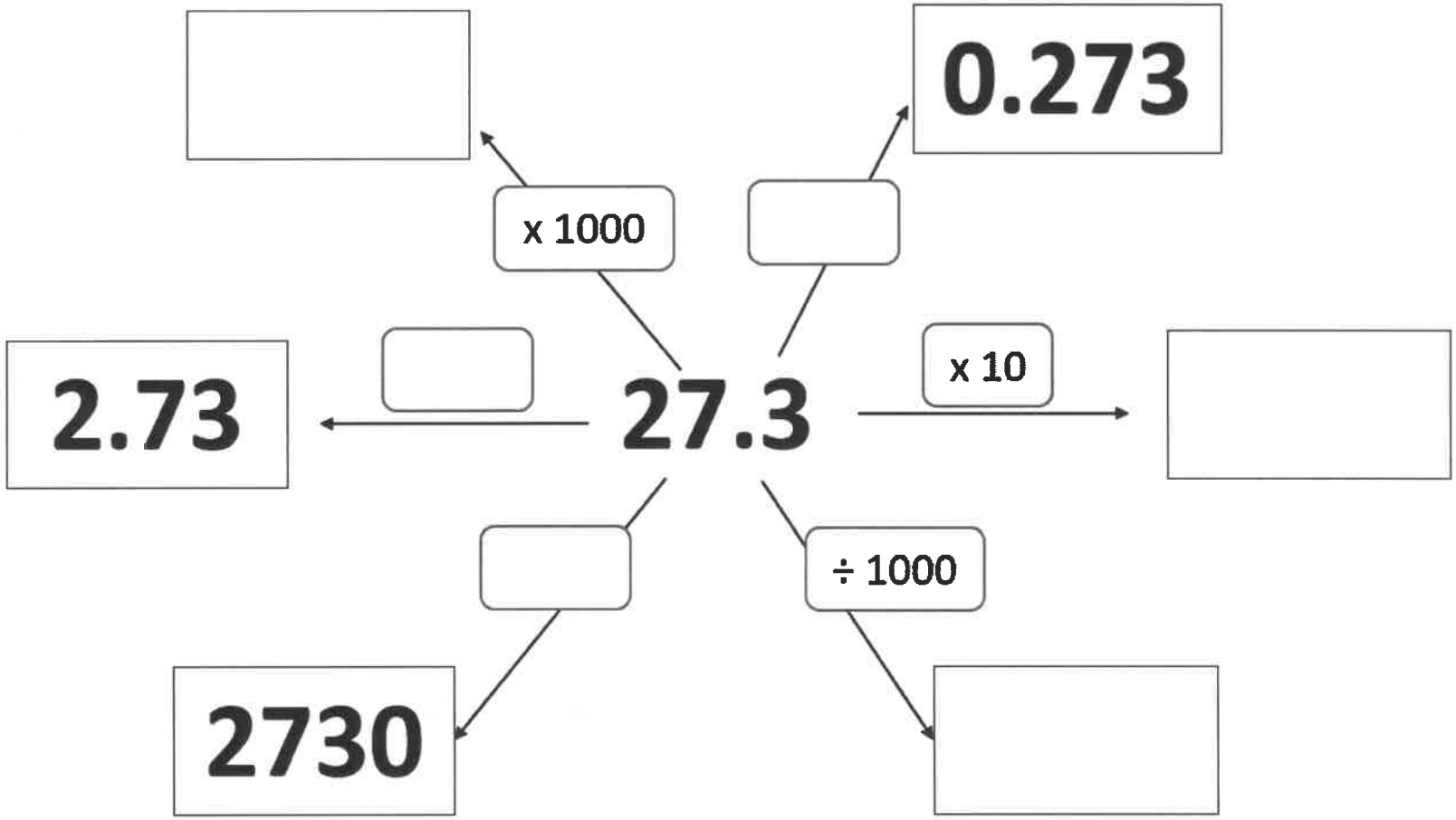
78.43 × ☐ = 78,430

6450 ÷ ☐ = 64.5

6450 ÷ ☐ = 6.45

Extra Practice for All

Complete any empty boxes on this diagram. Watch out - they might be answers or operations...



Create a similar diagram for a partner to solve.

Practice Sheets Answers

Multiplying and dividing by 10 and 100 (mild)

1. 34.6 × 10 = 346
2. 34.6 × 100 = 3460
3. 6.74 × 10 = 67.4
4. 6.74 × 100 = 674
5. 483 ÷ 10 = 48.3
6. 483 ÷ 100 = 4.83
7. 56.1 ÷ 10 = 5.61
8. 56.1 × 10 = 561
9. 83.4 × 10 = 834
10. 83.4 ÷ 10 = 8.34
11. 47.2 ÷ 10 = 4.72
12. 47.2 × 100 = 4720

Multiplying and dividing by 10, 100 and 1000 (hot)

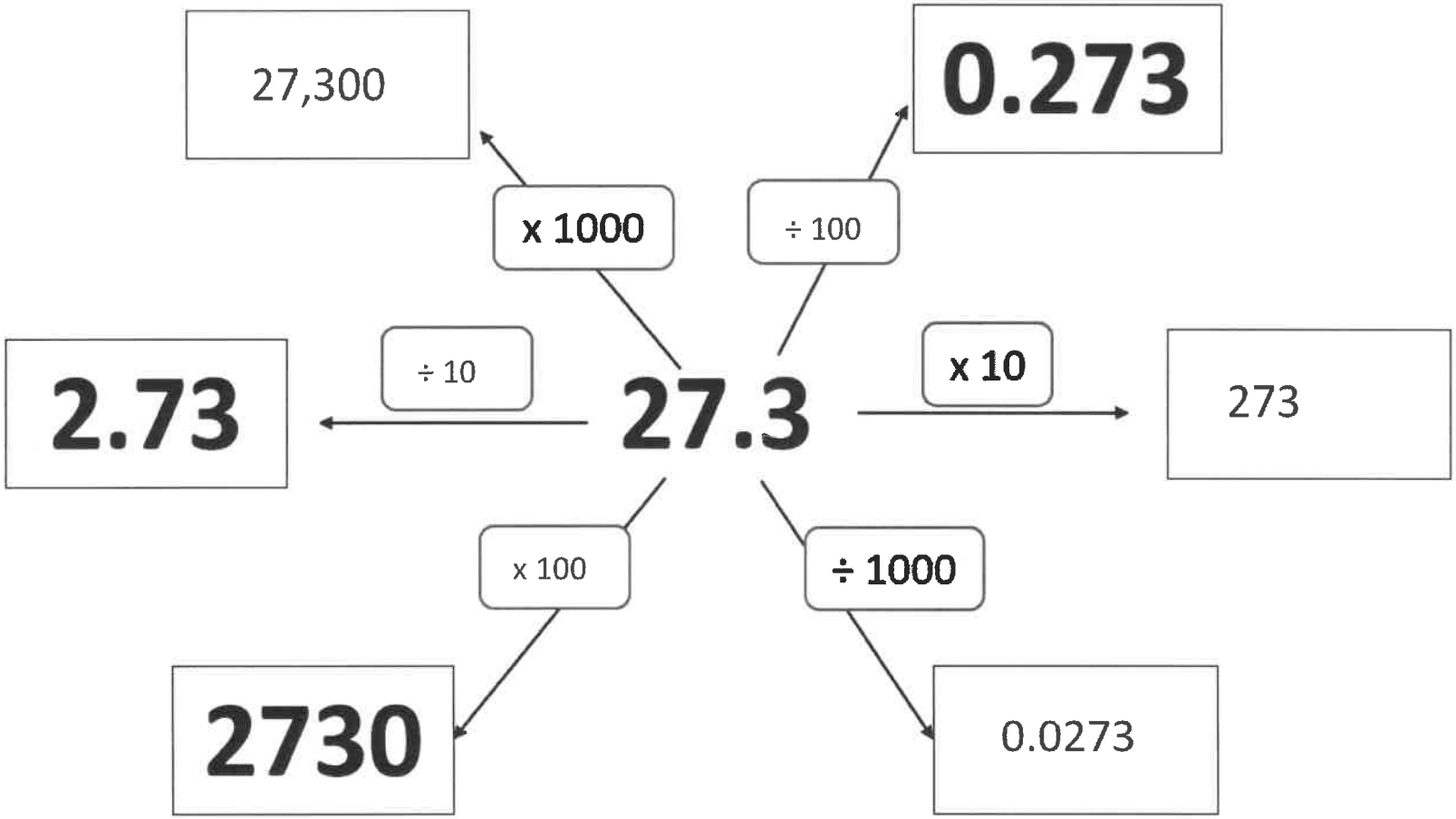
1. 456.8 × 10 = 4568
2. 4568 ÷ 10 = 456.8
3. 2.76 × 10 = 27.6
4. 843 ÷ 100 = 8.43
5. 47.3 × 100 = 4730
6. 783 ÷ 100 = 7.83
7. 45.62 × 100 = 4562
8. 783.4 ÷ 10 = 78.34
9. 45.74 × 1000 = 45740
10. 3620 ÷ 1000 = 3.62
11. 348.2 × 10 = 3482
12. 34,820 ÷ 1000 = 34.82

Challenge

78.43 × 100 = 7843
78.43 × 1000 = 78,430
6450 ÷ 100 = 64.5
6450 ÷ 1000 = 6.45

Extra Practice for All Answers

Complete any empty boxes on this diagram. Watch out - they might be answers or operations...



Create a similar diagram for a partner to solve.

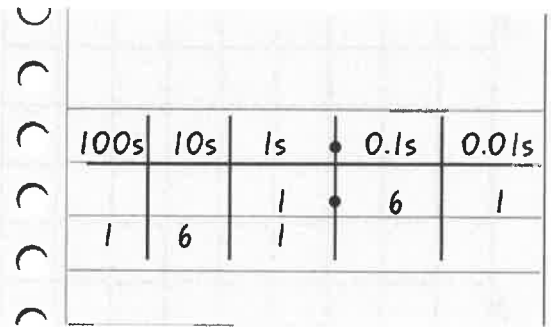
A Bit Stuck?
Left, left, right, right?

Work in pairs, but record numbers on your own place value grid

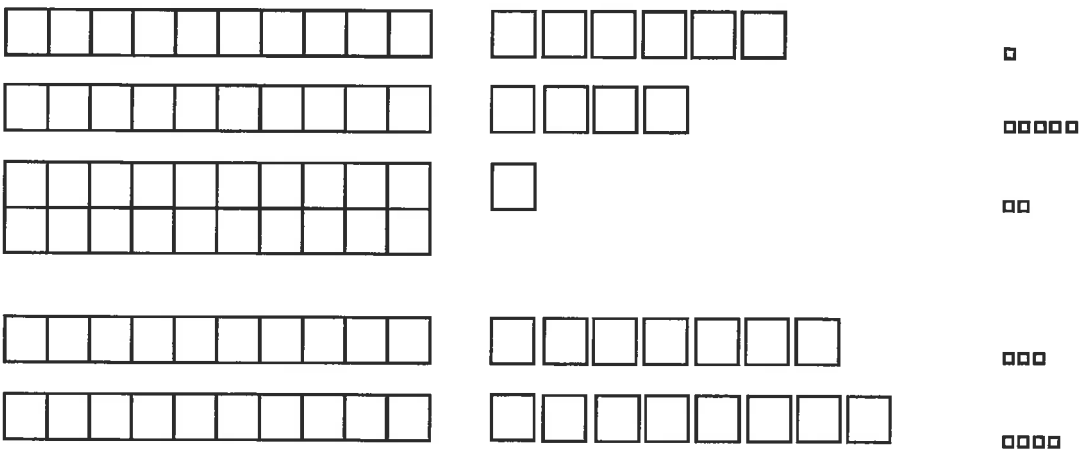
Things you will need:
- A place value grid
- A pencil

What to do:

- Look at the first group of fraction strips.
  What number are they showing?
  Write the number in your place value grid.
- Multiply this number by 100.
  Write the answer in your place value grid.
- Repeat this for each fraction picture.



100s	10s	1s	0.1s	0.01s
		1	6	1
1	6	1		



- Choose three of these numbers to divide by 100.
  Write the number and the answer in your place value grid.

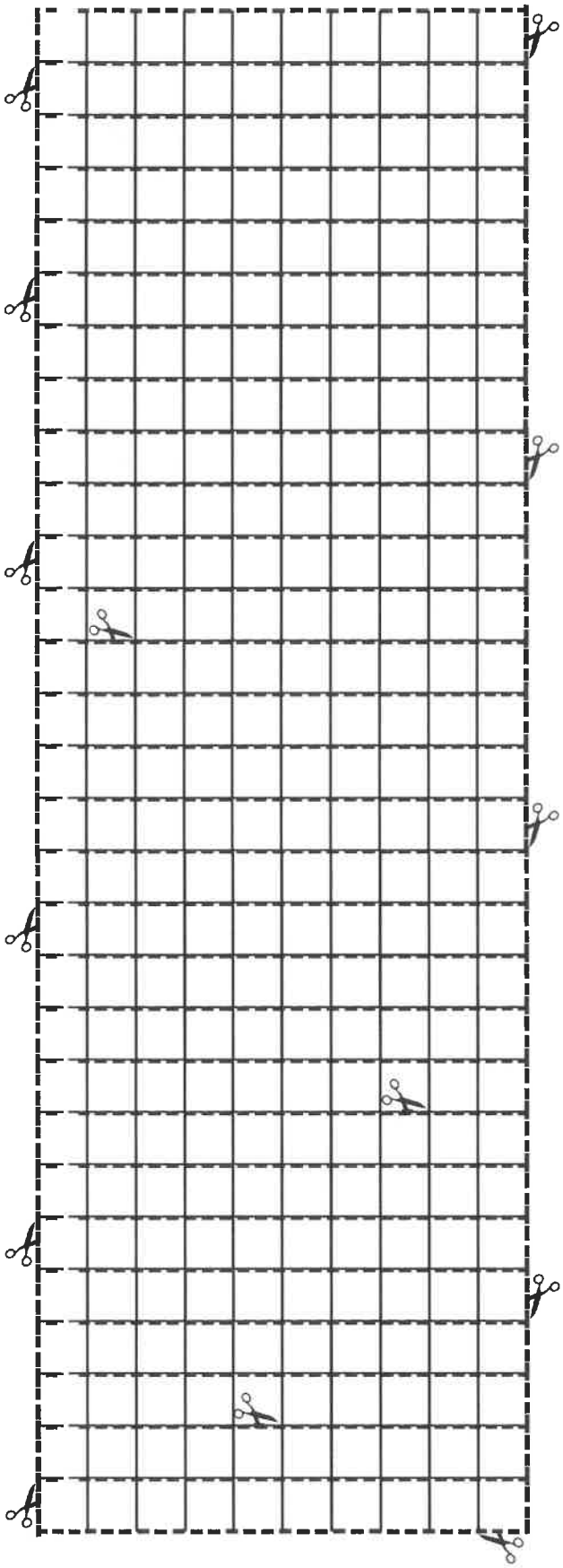
654 **127** **243** **438** **364**

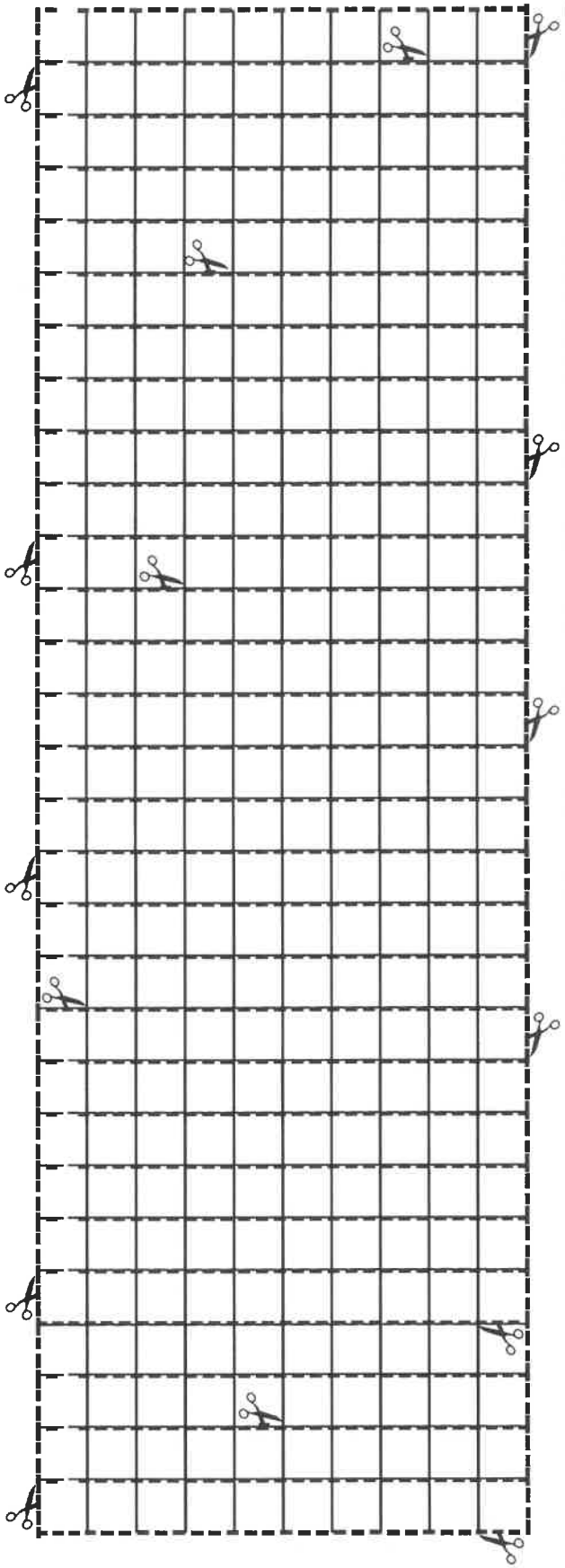
S-t-r-e-t-c-h:

Multiply 0.25, 0.09 and 1.03 by 100.
Divide 408, 27 and 360 by 100.

Learning outcomes:
- I understand the value of each digit in a number with two decimal places.
- I am beginning to multiply numbers with two decimal places by 100 and divide 3-digit numbers by 100.

A Bit Stuck?
Left, left, right, right?





A Bit Stuck?
Left, left, right, right?

100s	10s	1s	0.1s	0.01s

Check your understanding
Questions

Divide 47,310 by 10 repeatedly until you get a number that is less than 100.
Write that number.

Fill the empty boxes:

0.15 = 1.5 ☐ 10 5209 = ☐ x 100 ☐ ÷ 100 = 4.7 10.08 = ☐ ÷ 1000

Write the next two numbers in each sequence.

0.41 4.1 ____ ____

2.05 20.5 ____ ____

43,020 4302 ____ ____

True or false?

4030 ÷ 100 = 43 1.09 x 100 = 190 0.09 x 10 = 0.9 7000 ÷ 1000 = 0.7

Fold here to hide answers

Check your understanding
Answers

Divide 47,310 by 10 repeatedly until you get a number that is less than 100.
Write that number. 47.31

Each time the number is divided by 10, the digits move one place value column to the right:

47,310
4731
473.1
47.31

Fill the empty boxes:

0.15 = 1.5 ÷ 10 5209 = 52.09 x 100 470 ÷ 100 = 4.7 10.08 = 10,080 ÷ 1000

Write the next two numbers in each sequence.

0.41 4.1 41 410 (Multiplying by 10)

2.05 20.5 205 2050 (Multiplying by 10)

43,020 4302 430.2 43.02 (Dividing by 10)

True or false?

4030 ÷ 100 = 43 False – should be 40.3

1.09 x 100 = 190 False – should be 109

0.09 x 10 = 0.9 True

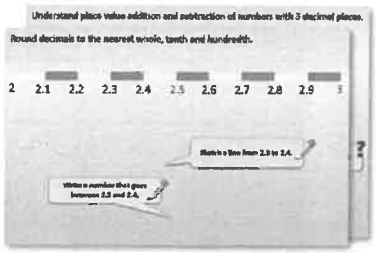
7000 ÷ 1000 = 0.7 False – should be 7

Year 5: Week 2, Day 2

Decimals: Rounding to the nearest tenth and whole

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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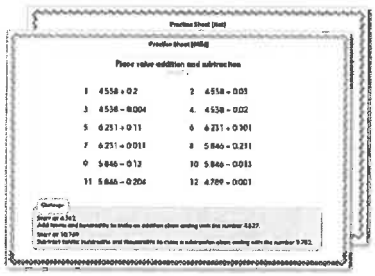

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3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**

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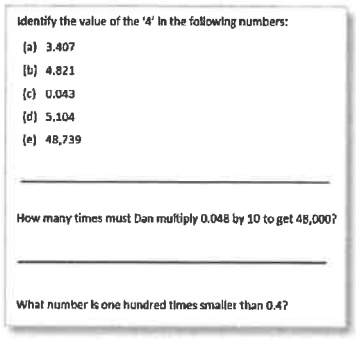
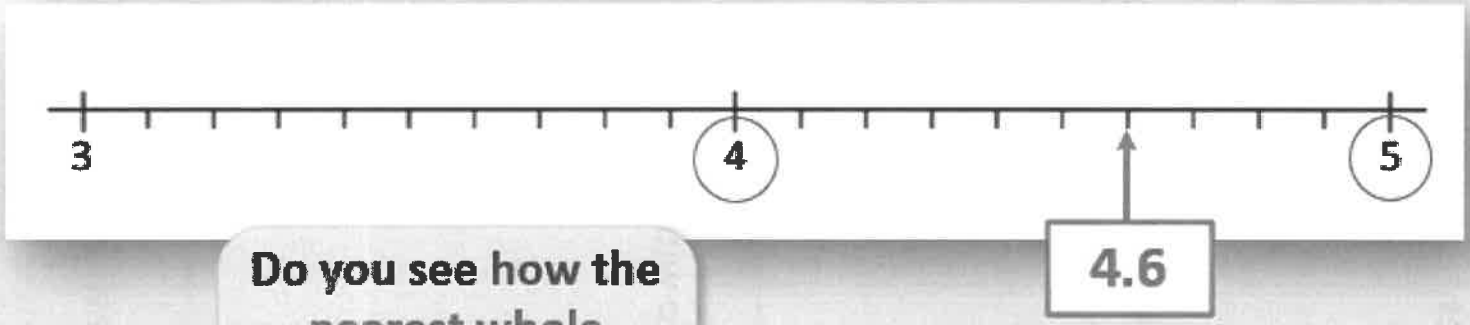
4. Have I mastered the topic? A few questions to **Check your understanding.** Fold the page to hide the answers!



Learning Reminders

Round 1-place decimals to the nearest whole.

I've marked on 4.6



Do you see how the nearest whole number to 4.6 is 5, not 4?

Which whole number would 3.3 round to?

It rounds down to 3.

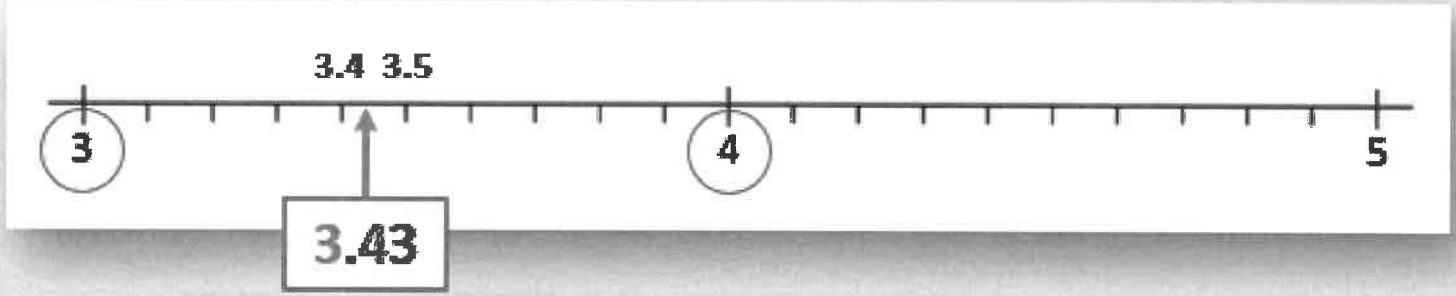
Which whole number would 4.5 round to?

*Don't forget that **halfway** numbers round **up**.*
*So, 4.5 rounds up to 5 as the **nearest whole**.*

Learning Reminders

Round 2-place decimals to the nearest tenth or whole.

I've marked on 3.43

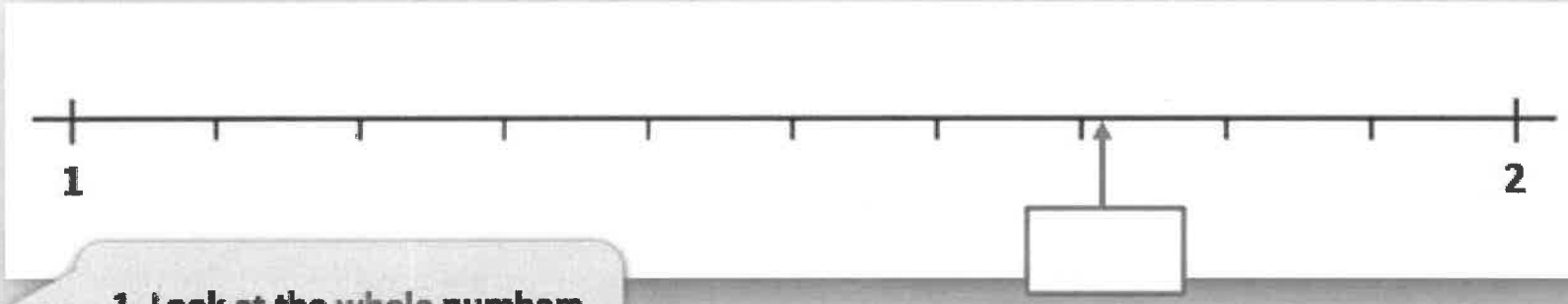


Do you see how the nearest whole number is 3, not 4?

- **If we want to round 3.43 to the nearest tenth, look at the tenths numbers on either side... 3.4 and 3.5.**
- **How far along is 3.43 between 3.40 and 3.50?**
- ***Not* halfway (that would be 3.45) so it rounds down to 3.4.**

Learning Reminders

Place numbers with 2 decimal places on a line; round to the nearest tenth or whole.



1. Look at the whole numbers at either end of this line...

2. Label the tenths that are landmarked.

3. Estimate the missing number.

Which tenths number does the missing number round to?

It rounds down to 1.7

Which whole number does the missing number round to?

It rounds up to 2

Practice Sheet Mild

Placing and rounding decimals

Mark the numbers in the table on the line. Then round them to the nearest tenth and whole number.

Number	Nearest tenth	Nearest whole
2.49		
2.25		
2.05		
2.53		
2.94		
2.06		
2.31		
2.86		
2.75		
2.17		

Practice Sheet Hot

Placing and rounding decimals

Mark the numbers in the table on the line. Then round them to the nearest tenth and whole number.
What other marks or numbers could you put on the line to help you?

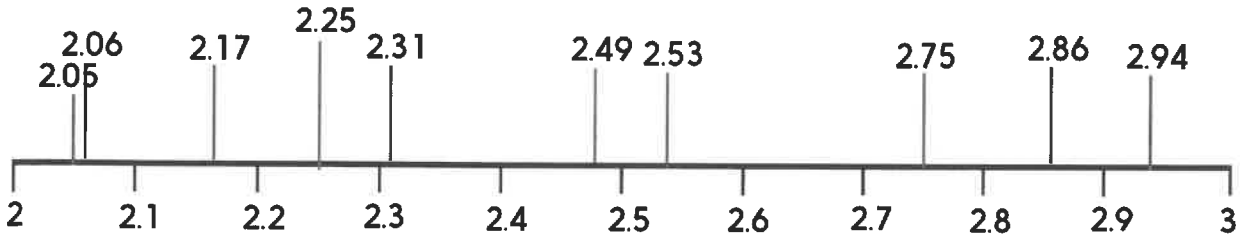
Number	Nearest tenth	Nearest whole
2.49		
2.78		
2.25		
2.53		
2.94		
2.06		
2.31		
2.86		
2.65		
2.17		

Challenge

Mark the following numbers on the line:
a) The smallest 2-place decimal that rounds up to 2.5 as the nearest tenth.
b) The largest 2-place decimal that rounds down to 3 as the nearest whole.

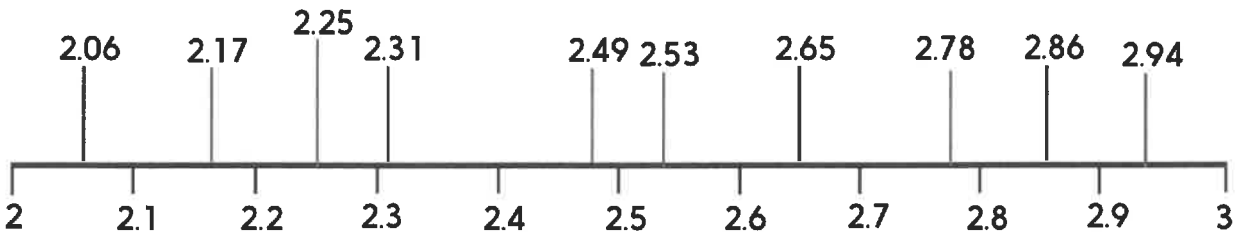
Practice Sheets Answers

Placing and rounding decimals (mild)



Number	Nearest tenth	Nearest whole
2.49	2.5	2
2.25	2.3	2
2.05	2.1	2
2.53	2.5	3
2.94	2.9	3
2.06	2.1	2
2.31	2.3	2
2.86	2.9	3
2.75	2.8	3
2.17	2.2	2

Placing and rounding decimals (hot)



Number	Nearest tenth	Nearest whole
2.49	2.5	2
2.78	2.8	3
2.25	2.3	2
2.53	2.5	3
2.94	2.9	3
2.06	2.1	2
2.31	2.3	2
2.86	2.9	3
2.65	2.7	3
2.17	2.2	2

Challenge

a.) 2.44
b.) 2.49

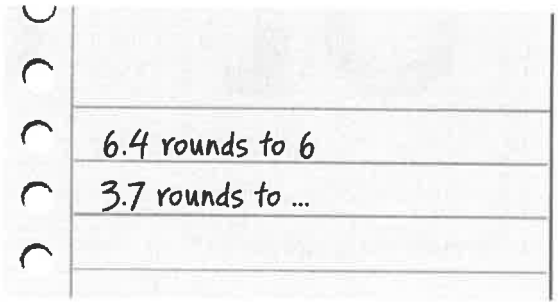
A Bit Stuck?
Mark and round

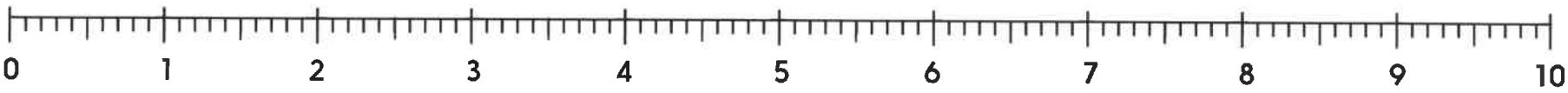
Work in pairs, but write on your own sheet

What to do:

- Shuffle the digit cards.
  Turn them face down.
  Take the top two cards and make a number with one decimal place, e.g. take 6 and 4 to make 6.4.
- Mark this number on the line.
- Round this number to the nearest whole number.
- Repeat.
- When all the cards have been used, shuffle them and place face down. That way you can keep playing.
- How many numbers can you mark and round before time is up?

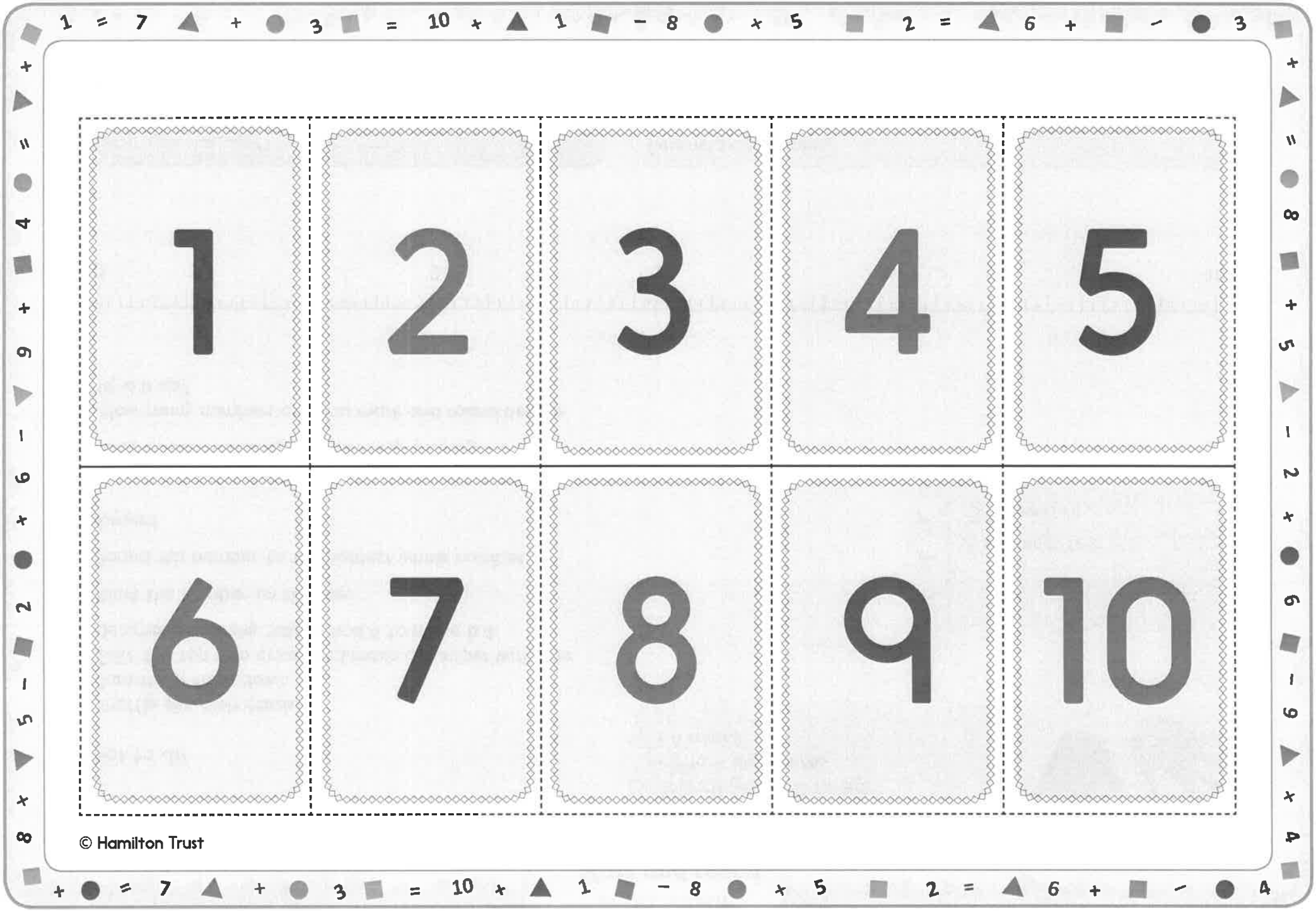
Things you will need:
- 0 to 9 digit cards
- A pencil





S-t-r-e-t-c-h:
Think of two numbers between 4 and 5, one which rounds down to 4 and one which rounds up to 5.

Learning outcomes:
- I can mark numbers with one decimal place on a marked number line.
- I can round numbers with one decimal place to the nearest whole.
- I am beginning to solve problems involving rounding to the nearest whole.



Check your understanding
Questions

What number am I? (three clues for just one number – guess after each clue)

A

(i) I round to 5.6 as the nearest tenth.
(ii) I round to 6 as the nearest whole number.
(iii) My digital root is 6.

B

(i) I round to 3.5 as the nearest tenth.
(ii) I round to 3 as the nearest whole number.
(iii) My digits are consecutive.

Sam wrote:
2.49 rounds to 3 as the nearest whole number because 2.49 rounds to 2.5 as the nearest tenth, and 2.5 rounds up to 3 as the nearest whole number.
Explain why his reasoning is incorrect.

Fold here to hide answers:

Check your understanding
Answers

What number am I? (three clues for just one number – guess after each clue)

A

(i) I round to 5.6 as the nearest tenth.
(ii) I round to 6 as the nearest whole number.
(iii) My digital root is 6. 5.55 or 5.64

B

(i) I round to 3.5 as the nearest tenth.
(ii) I round to 3 as the nearest whole number.
(iii) My digits are consecutive. 3.45

Sam wrote:
2.49 rounds to 3 as the nearest whole number because 2.49 rounds to 2.5 as the nearest tenth, and 2.5 rounds up to 3 as the nearest whole number.
Explain why his reasoning is incorrect.
This is a common misunderstanding. To round 2.49 to the nearest whole, the original number must be used. It can be checked on a number line that 2.49 is closer to (and therefore rounds to) 3 not 4.

Year 5: Week 2, Day 3

Use equivalence to compare and order fractions

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

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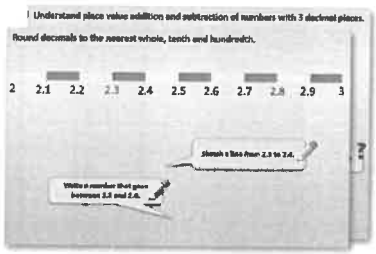

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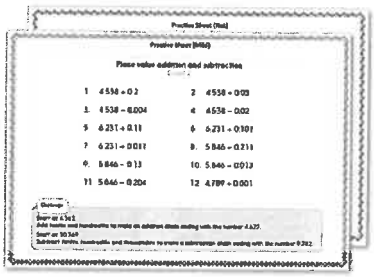

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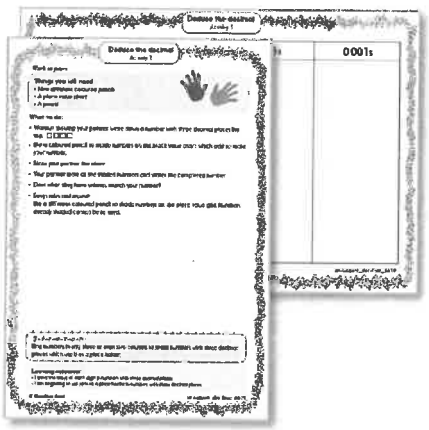
3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



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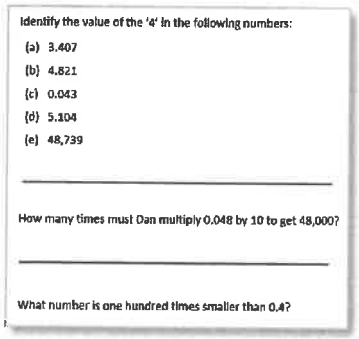
4. Have I mastered the topic? A few questions to **Check your understanding.** Fold the page to hide the answers!



Learning Reminders

Comparing fractions, using equivalence.

Write 3 sentences to say what the *Fraction Wall* is and how we can use it.

Now write as many fractions equivalent to $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{5}$ as you can.
One is shaded to get you started...

Fraction wall

1											
$\frac{1}{2}$										$\frac{1}{2}$	
$\frac{1}{3}$								$\frac{1}{3}$			$\frac{1}{3}$
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{5}$		$\frac{1}{5}$			$\frac{1}{5}$			$\frac{1}{5}$			
$\frac{1}{6}$			$\frac{1}{6}$			$\frac{1}{6}$			$\frac{1}{6}$		
$\frac{1}{7}$				$\frac{1}{7}$			$\frac{1}{7}$				
$\frac{1}{8}$					$\frac{1}{8}$						
$\frac{1}{9}$						$\frac{1}{9}$					
$\frac{1}{10}$							$\frac{1}{10}$				
$\frac{1}{11}$								$\frac{1}{11}$			
$\frac{1}{12}$									$\frac{1}{12}$		

Answers

$\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$ $\frac{1}{4} = \frac{2}{8} = \frac{3}{12}$ $\frac{1}{5} = \frac{2}{10}$

Learning Reminders

Comparing fractions, using **equivalence.**

Which is bigger? $\frac{2}{3}$ $\frac{7}{9}$

Use the wall to see that $\frac{2}{3}$ are the same as $\frac{6}{9}$ ...

Fraction wall

1											
1/2						1/2					
1/3					1/3					1/3	
1/4				1/4				1/4				1/4
1/5			1/5			1/5			1/5		
1/6		1/6			1/6			1/6			1/6
1/7		1/7		1/7		1/7		1/7		1/7	
1/8	1/8		1/8		1/8		1/8		1/8		1/8
1/9		1/9		1/9		1/9		1/9		1/9	
1/10	1/10		1/10		1/10		1/10		1/10		1/10
1/11		1/11		1/11		1/11		1/11		1/11	
1/12	1/12		1/12		1/12		1/12		1/12		1/12

$\frac{6}{9} < \frac{7}{9}$

so, $\frac{2}{3} < \frac{7}{9}$

Learning Reminders

Comparing fractions, using equivalence.

Which is bigger? $\frac{7}{12}$ $\frac{3}{4}$

Use the wall to see that $\frac{3}{4}$ are the same as $\frac{9}{12}$ ...

Fraction wall

1											
1/2						1/2					
1/3				1/3				1/3			
1/4			1/4			1/4			1/4		
1/5		1/5			1/5			1/5			1/5
1/6		1/6		1/6		1/6		1/6		1/6	
1/7	1/7		1/7		1/7		1/7		1/7		1/7
1/8		1/8		1/8		1/8		1/8		1/8	
1/9		1/9		1/9		1/9		1/9		1/9	
1/10		1/10		1/10		1/10		1/10		1/10	
1/11		1/11		1/11		1/11		1/11		1/11	
1/12		1/12		1/12		1/12		1/12		1/12	

$\frac{7}{12} < \frac{9}{12}$

so, $\frac{7}{12} < \frac{3}{4}$

Comparing fractions, using equivalence.

Which is bigger? $\frac{2}{5}$ $\frac{3}{10}$

Use the wall to see that $\frac{2}{5}$ are the same as $\frac{4}{10}$ ...

Fraction wall

1											
1/2						1/2					
1/3				1/3				1/3			
1/4			1/4			1/4			1/4		
1/5		1/5			1/5			1/5			1/5
1/6		1/6		1/6		1/6		1/6		1/6	
1/7	1/7		1/7		1/7		1/7		1/7		1/7
1/8		1/8		1/8		1/8		1/8		1/8	
1/9		1/9		1/9		1/9		1/9		1/9	
1/10		1/10		1/10		1/10		1/10		1/10	
1/11		1/11		1/11		1/11		1/11		1/11	
1/12		1/12		1/12		1/12		1/12		1/12	

$\frac{4}{10} > \frac{3}{10}$

so, $\frac{2}{5} > \frac{3}{10}$

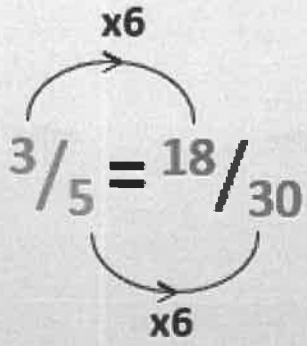
Learning Reminders

Comparing fractions, using **equivalence.**

$\frac{3}{5}$ $\frac{7}{10}$ $\frac{8}{15}$

What could we do to compare these three fractions?

Write them all as thirtieths.
The fraction wall can't help this time as there are no thirtieths on it!



Remember: Do the same multiplication, or division, to the numerator *and* denominator to create an equivalent fraction...

$\frac{21}{30} > \frac{18}{30} > \frac{16}{30}$

$\frac{7}{10} > \frac{3}{5} > \frac{8}{15}$

Practice Sheet Mild
Equivalent fractions

Use the fraction wall to help you join each fraction on the left to the equivalent fraction in its simplest form.

$\frac{2}{8}$	$\frac{1}{2}$
$\frac{3}{6}$	
$\frac{3}{9}$	
$\frac{3}{12}$	$\frac{1}{3}$
$\frac{4}{12}$	
$\frac{5}{10}$	$\frac{2}{3}$
$\frac{4}{8}$	
$\frac{6}{8}$	
$\frac{2}{6}$	$\frac{1}{4}$
$\frac{4}{6}$	
$\frac{8}{12}$	$\frac{3}{4}$
$\frac{9}{12}$	

Challenge

Write some fractions which are equivalent to $\frac{1}{4}$ but not on the fraction wall.

Practice Sheet Mild
Ordering fractions

Write these fractions as $\frac{1}{6}$s. Then write them in order, starting with the smallest first.

$\frac{2}{3}$ $\frac{1}{2}$ $\frac{1}{3}$

Write these fractions as $\frac{1}{10}$s. Then write them in order, starting with the smallest first.

$\frac{1}{2}$ $\frac{2}{5}$ $\frac{3}{5}$

Write these fractions as $\frac{1}{12}$s. Then write them in order, starting with the smallest first.

$\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{6}$ $\frac{5}{6}$ $\frac{1}{2}$

Practice Sheet Hot
Equivalent fractions

Ring all the fractions that are equivalent to $\frac{1}{4}$

$\frac{2}{8}$ $\frac{2}{7}$ $\frac{3}{12}$ $\frac{4}{20}$ $\frac{5}{20}$ $\frac{10}{30}$ $\frac{10}{40}$ $\frac{4}{16}$ $\frac{4}{100}$

Ring all the fractions that are equivalent to $\frac{1}{3}$

$\frac{3}{12}$ $\frac{3}{6}$ $\frac{2}{6}$ $\frac{4}{12}$ $\frac{4}{9}$ $\frac{10}{30}$ $\frac{3}{9}$ $\frac{5}{15}$ $\frac{6}{15}$

Ring all the fractions that are equivalent to $\frac{1}{5}$

$\frac{5}{15}$ $\frac{2}{10}$ $\frac{3}{15}$ $\frac{4}{20}$ $\frac{5}{20}$ $\frac{5}{100}$ $\frac{20}{100}$ $\frac{10}{50}$ $\frac{4}{25}$

Complete this list of fractions equivalent to $\frac{3}{4}$

$\frac{3}{4}$ $\frac{\square}{8}$ $\frac{\square}{12}$ $\frac{\square}{16}$ $\frac{\square}{20}$ $\frac{30}{\square}$ $\frac{\square}{60}$ $\frac{\square}{100}$ $\frac{21}{\square}$ $\frac{\square}{\square}$

Challenge 1

Ava says that she can write $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{5}$ and $\frac{2}{3}$ as an equivalent number of fiftieths.
Do you agree with her?

Challenge 2

Write at least 5 fractions which are equivalent to $\frac{2}{5}$.

Practice Sheet Hot
Comparing and ordering fractions

Compare these pairs of fractions. Write them as the same 'sort' of fractions (with the same denominator), then write > or < in between.

1. $\frac{2}{3}$ $\frac{3}{6}$

2. $\frac{2}{3}$ $\frac{2}{9}$

3. $\frac{3}{10}$ $\frac{1}{5}$

4. $\frac{3}{4}$ $\frac{7}{8}$

5. $\frac{5}{6}$ $\frac{11}{12}$

6. $\frac{7}{10}$ $\frac{3}{5}$

7. $\frac{1}{3}$ $\frac{5}{12}$

8. $\frac{2}{5}$ $\frac{7}{15}$

9. $\frac{7}{10}$ $\frac{13}{20}$

10. $\frac{1}{3}$ $\frac{4}{15}$

11. $\frac{1}{2}$ $\frac{2}{5}$

12. $\frac{2}{3}$ $\frac{4}{5}$

Write these groups of fractions as the same 'sort' of fractions. Then write each group in order from least to greatest.

13. $\frac{1}{2}$ $\frac{3}{4}$ $\frac{5}{8}$

14. $\frac{1}{2}$ $\frac{3}{5}$ $\frac{7}{10}$

15. $\frac{1}{3}$ $\frac{4}{15}$ $\frac{2}{5}$

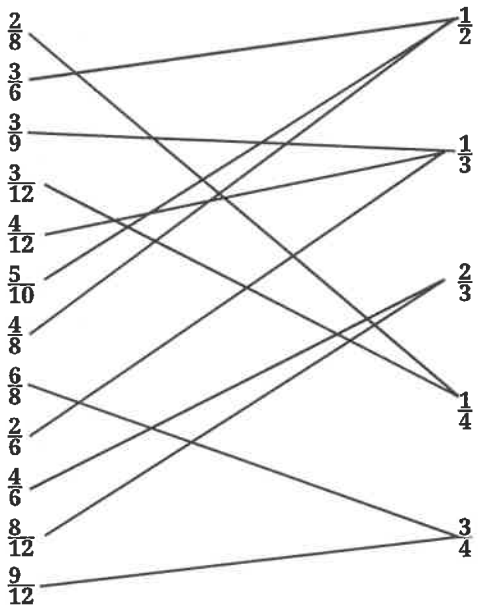
16. $\frac{17}{20}$ $\frac{4}{5}$ $\frac{7}{10}$

Challenge

Create a group of four fractions with different denominators that can be re-written as the same 'sort'. Order them using > or < symbols.

Practice Sheets Answers

Equivalent fractions (mild)



Ordering fractions (mild)

$\frac{2}{3} = \frac{4}{6}$
$\frac{1}{2} = \frac{3}{6}$ Order smallest first: $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$
$\frac{1}{3} = \frac{2}{6}$

$\frac{1}{2} = \frac{5}{10}$
$\frac{2}{5} = \frac{4}{10}$ Order smallest first: $\frac{2}{5}$ $\frac{1}{2}$ $\frac{3}{5}$
$\frac{3}{5} = \frac{6}{10}$

$\frac{2}{3} = \frac{8}{12}$
$\frac{3}{4} = \frac{9}{12}$
$\frac{1}{4} = \frac{3}{12}$
$\frac{1}{3} = \frac{4}{12}$ Order smallest first: $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{9}{12}$
$\frac{1}{6} = \frac{2}{12}$
$\frac{5}{6} = \frac{10}{12}$
$\frac{1}{2} = \frac{6}{12}$

Equivalent fractions (hot)

The fractions equivalent to $\frac{1}{4}$ are: $\frac{2}{8}$ $\frac{3}{12}$ $\frac{5}{20}$ $\frac{10}{40}$ $\frac{4}{16}$

The fractions equivalent to $\frac{1}{3}$ are: $\frac{2}{6}$ $\frac{4}{12}$ $\frac{10}{30}$ $\frac{3}{9}$ $\frac{5}{15}$

The fractions equivalent to $\frac{1}{5}$ are: $\frac{2}{10}$ $\frac{3}{15}$ $\frac{4}{20}$ $\frac{20}{100}$ $\frac{10}{50}$

$\frac{3}{4}$ $\frac{6}{8}$ $\frac{9}{12}$ $\frac{12}{16}$ $\frac{15}{20}$ $\frac{30}{40}$ $\frac{45}{60}$ $\frac{75}{100}$ $\frac{21}{28}$ The final fraction in this list can be any that is equivalent to $\frac{3}{4}$.

Challenge 1

Ava is partly correct: $\frac{1}{2} = \frac{25}{50}$ and $\frac{2}{5} = \frac{20}{50}$. but $\frac{2}{3}$ and $\frac{3}{4}$ cannot be writen as fiftieths, because the denominators are not factors of 50.

Challenge 2

Fractions equivalent to $\frac{2}{5}$ could include: $\frac{4}{10}$ $\frac{6}{15}$ $\frac{8}{20}$ $\frac{10}{25}$ $\frac{12}{30}$ and so on

Comparing and ordering fractions (hot)

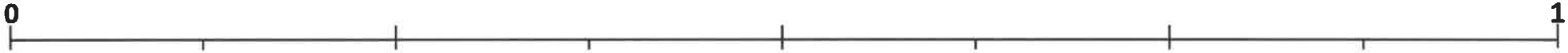
1. $\frac{2}{3} = \frac{4}{6}$, so $\frac{2}{3} > \frac{3}{6}$
2. $\frac{2}{3} = \frac{6}{9}$, so $\frac{2}{3} > \frac{2}{9}$
3. $\frac{1}{5} = \frac{2}{10}$, so $\frac{3}{10} > \frac{1}{5}$
4. $\frac{3}{4} = \frac{6}{8}$, so $\frac{3}{4} < \frac{7}{8}$
5. $\frac{5}{6} = \frac{10}{12}$, so $\frac{5}{6} < \frac{11}{12}$
6. $\frac{3}{5} = \frac{6}{10}$, so $\frac{7}{10} > \frac{3}{5}$
7. $\frac{1}{3} = \frac{4}{12}$, so $\frac{1}{3} < \frac{5}{12}$
8. $\frac{2}{5} = \frac{6}{15}$, so $\frac{2}{5} < \frac{7}{15}$
9. $\frac{7}{10} = \frac{14}{20}$, so $\frac{7}{10} > \frac{13}{20}$
10. $\frac{1}{3} = \frac{3}{15}$, so $\frac{1}{3} > \frac{4}{15}$
11. $\frac{1}{2} = \frac{5}{10}$ and $\frac{2}{5} = \frac{4}{10}$, so $\frac{1}{2} > \frac{2}{5}$
12. $\frac{2}{3} = \frac{10}{15}$ and $\frac{4}{5} = \frac{12}{15}$, so $\frac{2}{3} < \frac{4}{5}$
13. $\frac{1}{2} = \frac{4}{8}$ $\frac{3}{4} = \frac{6}{8}$, so $\frac{1}{2} < \frac{5}{8} < \frac{3}{4}$
14. $\frac{1}{2} = \frac{5}{10}$ $\frac{3}{5} = \frac{6}{10}$, so $\frac{1}{2} < \frac{3}{5} < \frac{7}{10}$
15. $\frac{1}{3} = \frac{5}{15}$ $\frac{2}{5} = \frac{6}{15}$, so $\frac{4}{15} < \frac{1}{3} < \frac{2}{5}$
16. $\frac{7}{10} = \frac{14}{20}$ $\frac{4}{5} = \frac{16}{20}$, so $\frac{7}{10} < \frac{4}{5} < \frac{17}{20}$

A Bit Stuck?
Fraction families

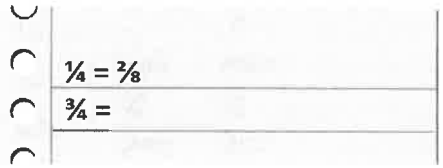
Things you will need:
- A pencil

What to do:

1. Label the quarters above this line. Label the eighths below it.



Now write as many pairs of equivalent fractions as you can.



2. Label the fifths above this line. Label the tenths below it.

Now write as many pairs of equivalent fractions as you can.

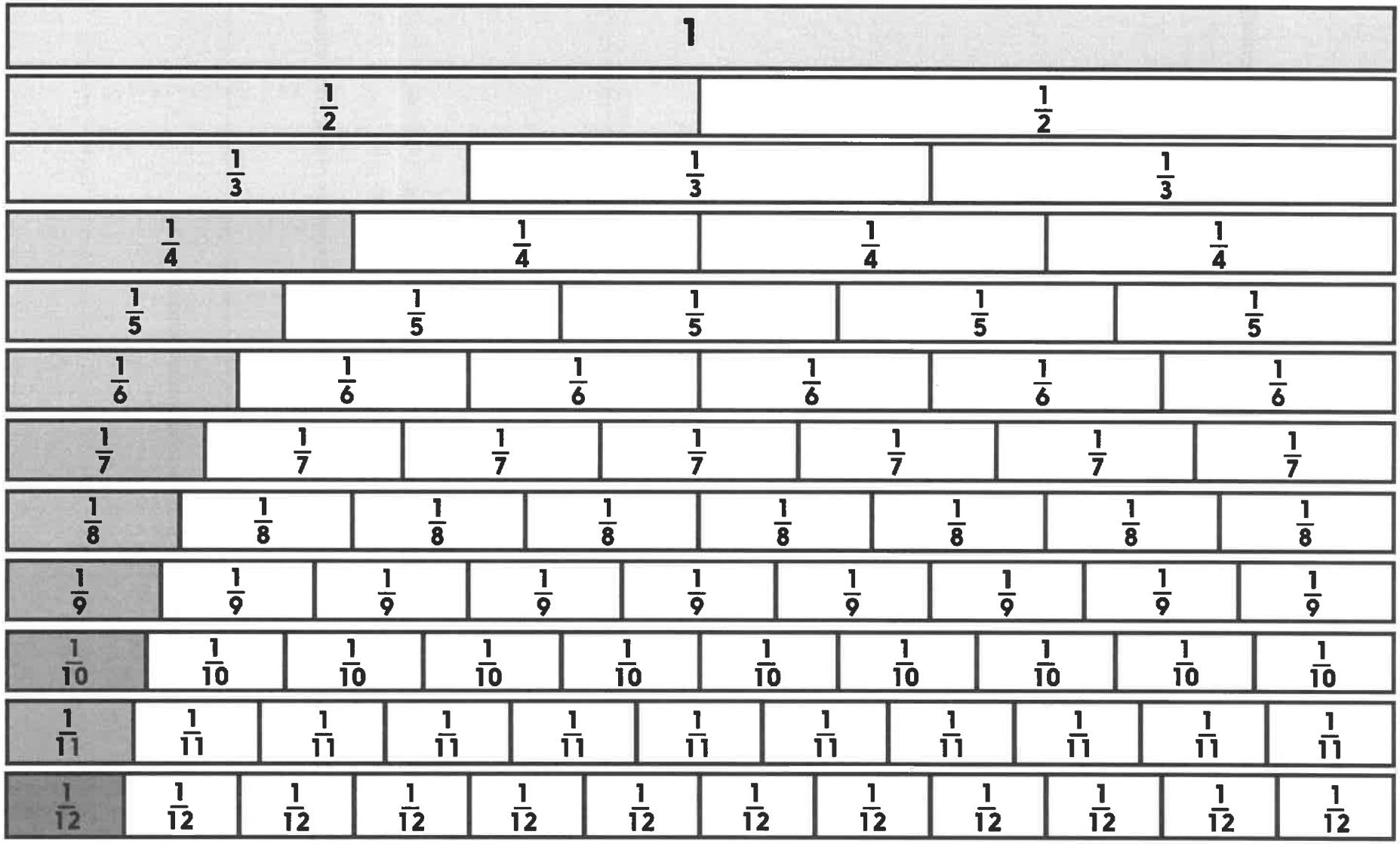
3. Label the sixths above this line. Label the twelfths below it.

Now write as many pairs of equivalent fractions as you can.

S-t-r-e-t-c-h:
Write as many fractions as you can which are equivalent to ½, ¼ and ⅓.

Learning outcomes:
- I can identify pairs of equivalent fractions on a fraction line.
- I am beginning to identify fractions which are equivalent to ½, ¼ and ⅓, without the help of fraction line.

Resource Sheet
Fraction Wall



Check your understanding
Questions

- Write three fractions equivalent to $^{3}/_{5}$.
- Make an observation about the pattern in the denominators.
- Then write three fractions equivalent to $^{2}/_{3}$ and do the same.
  What can you predict about the pattern in the denominators of fractions equivalent to $^{5}/_{6}$?

Write the missing numbers to make each number sentence true.

$^{?}/_{6} > {}^{7}/_{12}$

$^{?}/_{6} = {}^{5}/_{?}$

$^{4}/_{?} < {}^{5}/_{?}$

Fold here to hide answers:

Check your understanding
Answers

- **Write three fractions equivalent to $^{3}/_{5}$.** e.g. $^{6}/_{10}$ $^{9}/_{15}$ $^{12}/_{20}$
- **Make an observation about the pattern in the denominators.** They are all multiples of 5.
- **Then write three fractions equivalent to $^{2}/_{3}$ and do the same.** E.g. $^{4}/_{6}$ $^{6}/_{9}$ $^{8}/_{12}$ Denominators are multiples of 3.
- **What can you predict about the pattern in the denominators of fractions equivalent to $^{5}/_{6}$?** They will be multiples of 6, e.g. $^{10}/_{12}$ $^{15}/_{18}$ $^{20}/_{24}$

Write the missing numbers to make each number sentence true.

$^{?}/_{6} > {}^{7}/_{12}$ 1, 2 or 3 sixths

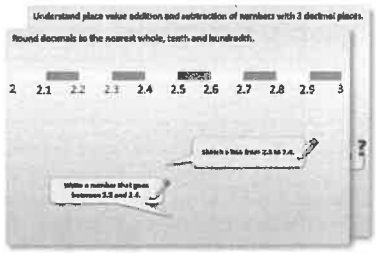
$^{?}/_{6} = {}^{5}/_{?}$ $^{1}/_{6} = {}^{5}/_{30}$

$^{4}/_{?} < {}^{5}/_{?}$ Many possibilities, some that can be checked on a fraction wall, e.g. $^{4}/_{7} < {}^{5}/_{6}$

Year 5: Week 2, Day 4
Find unit 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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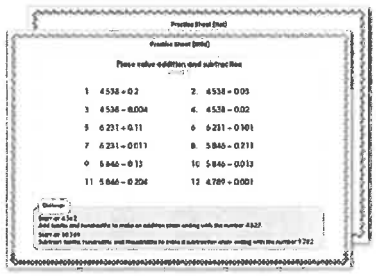
2. Tackle the questions on the **Practice Sheet**.
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.



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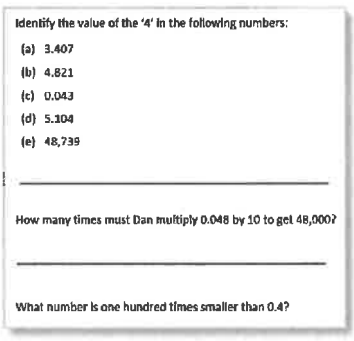
4. Have I mastered the topic? A few questions to **Check your understanding.**
   Fold the page to hide the answers!



Learning Reminders

Use division strategies to find unit fractions of amounts.

There are 148 children in a school.

The head teacher wants to split them into house teams.

She doesn't mind how many teams there are, but there must be the same number of children in each team.

Can the children be split into three equal house teams?
Let's try to find $^1/_3$ of 148 by dividing 148 by 3...

148		
? in team A	? in team B	? in team C

Remember how to use the vertical division layout of chunking? Follow this example...

$148 \div 3 =$

so, $\square \times 3 = 148$ ← *How many 3s are in 148?*

$40 \times 3 = 120$ ← *40 x 3 = 120. How much left?*

28 ← *How many 3s are in 28?*

$9 \times 3 = 27$

1 ← *9 and 1 left over*

$148 \div 3 = 49$ r 1

So, having a third of the children in each team won't work.
We have found that 148 does NOT divide by 3.
3 is not a factor of 148.

1 left over means that there *won't* be the same number of children in each team.

Learning Reminders

Use division strategies to find unit fractions of amounts.

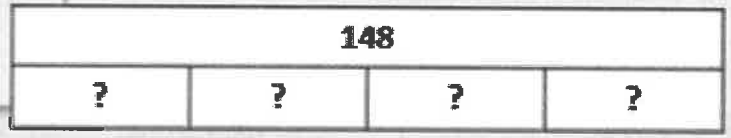
There are 148 children in a school.

The head teacher wants to split them into house teams.

She doesn't mind how many teams there are, but there must be the same number of children in each team.

We know that 148 can't be split into 5s. Why?

Find out if $\frac{1}{4}$, $\frac{1}{7}$ or $\frac{1}{8}$ of the school could be in one team.



148 ÷ 4 =

□ × 4 = 148 ← *How many 4s are in 148?*

30 × 4 = 120 ← *30 x 4 = 120. How much left?*

28 ← *How many 4s are in 28?*

7 × 4 = 28

0 ← *7 and 0 left over*

148 ÷ 4 = 37

0 left over means that there *ARE* the same number of children in each team.

Practice Sheet Mild

Find unit fractions of amounts

1. $\frac{1}{5}$ of 150
2. $\frac{1}{5}$ of 250
3. $\frac{1}{3}$ of 240
4. $\frac{1}{3}$ of 126
5. $\frac{1}{4}$ of 248
6. $\frac{1}{4}$ of 156
7. $\frac{1}{6}$ of 126
8. $\frac{1}{6}$ of 186
9. $\frac{1}{8}$ of 248
10. $\frac{1}{8}$ of 176
11. $\frac{1}{7}$ of 147
12. $\frac{1}{7}$ of 175
13. $\frac{1}{9}$ of 279
14. $\frac{1}{9}$ of 207
15. $\frac{1}{6}$ of 144
16. $\frac{1}{8}$ of 144

Challenge

What fraction of 125 is 25? What fraction of 182 is 26?

Find unit fractions of amounts

132 145 147 123 159 144 164 175

Investigate which of these numbers can be divided equally into 3, 4, 5, 6, 7, 8 or 9 groups to give a whole number answer.

- Write the corresponding fraction statement, e.g. $^1/_6$ of 132 is 22.
- Record your investigation on a large sheet of paper.
- Which numbers can be divided into more different-sized groups than other numbers? Why might that be?

Practice Sheets Answers

Find unit fractions of amounts (mild)

1. $\frac{1}{5}$ of 150 = 30
2. $\frac{1}{5}$ of 250 = 50
3. $\frac{1}{3}$ of 240 = 80
4. $\frac{1}{3}$ of 126 = 42
5. $\frac{1}{4}$ of 248 = 62
6. $\frac{1}{4}$ of 156 = 39
7. $\frac{1}{6}$ of 126 = 21
8. $\frac{1}{6}$ of 186 = 31
9. $\frac{1}{8}$ of 248 = 31
10. $\frac{1}{8}$ of 176 = 22
11. $\frac{1}{7}$ of 147 = 21
12. $\frac{1}{7}$ of 175 = 25
13. $\frac{1}{9}$ of 279 = 31
14. $\frac{1}{9}$ of 207 = 23
15. $\frac{1}{6}$ of 144 = 24
16. $\frac{1}{8}$ of 144 = 18

Challenge

25 is $\frac{1}{5}$ of 125. 26 is $\frac{1}{7}$ of 182.

Find unit fractions of amounts (hot)

Of these numbers, 144 has the most possible unit fractions.
It is divisible by 3, 4, 6, 8 and 9, as well as by 1, 2, 12, 18, 24, 36, 48 and 72!

A Bit Stuck?
Fraction facts

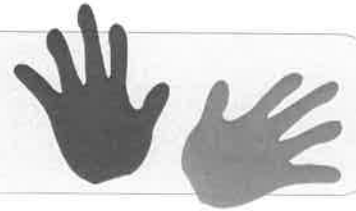
Use this activity to support learning for both today and tomorrow (Week 2 Day 5)

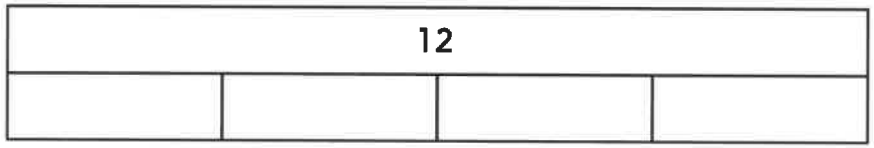
Work in pairs, but write your answers on your own sheet

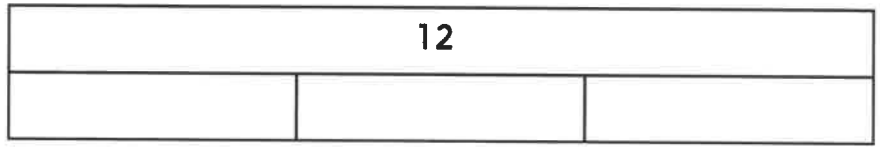
What to do:

- Work out what number needs to go in each empty section of the bar model. Then write a list of fraction facts to go with each.

Things you will need:
- A pencil







¼ of 12 is

½ of 12 is

¾ of 12 is

4/4 of 12 is

⅓ of 12 is

⅔ of 12 is

3/3 of 12 is

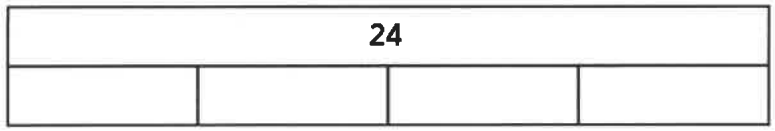
- Choose at least four other bar models. Work out what number needs to go in each empty section of the bar model. Then write a list of fraction facts to go with each.

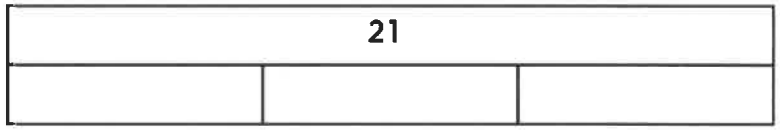
S-t-r-e-t-c-h:

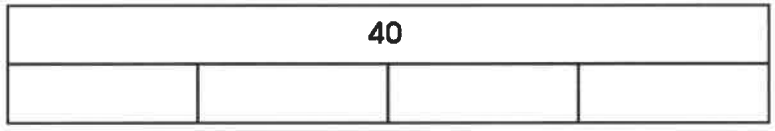
Draw your own bar models to show ⅓s of 15 and ¼s of 28.

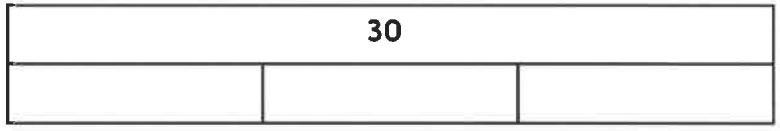
Learning outcomes:
- I can use bar models to find ⅓s, ¼s and ⅕s of numbers.
- I am beginning to draw my own bar models to find fractions of amounts.

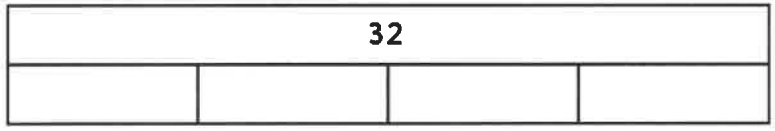
A Bit Stuck?
Fraction facts

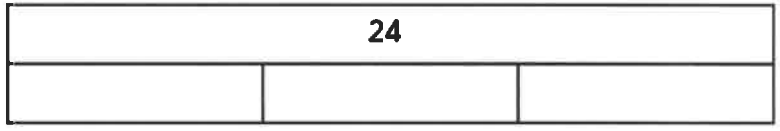


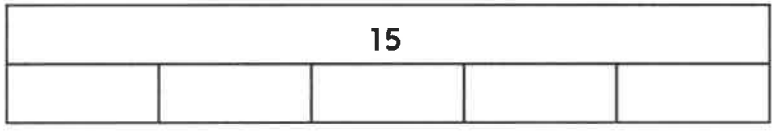


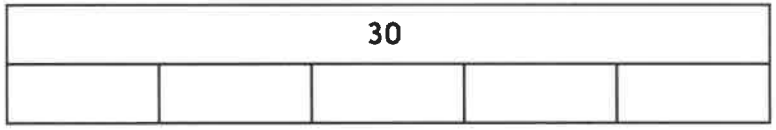


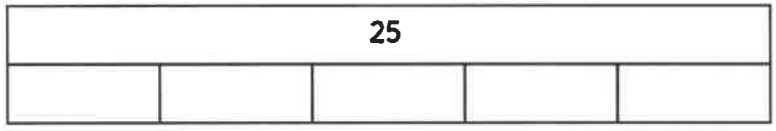




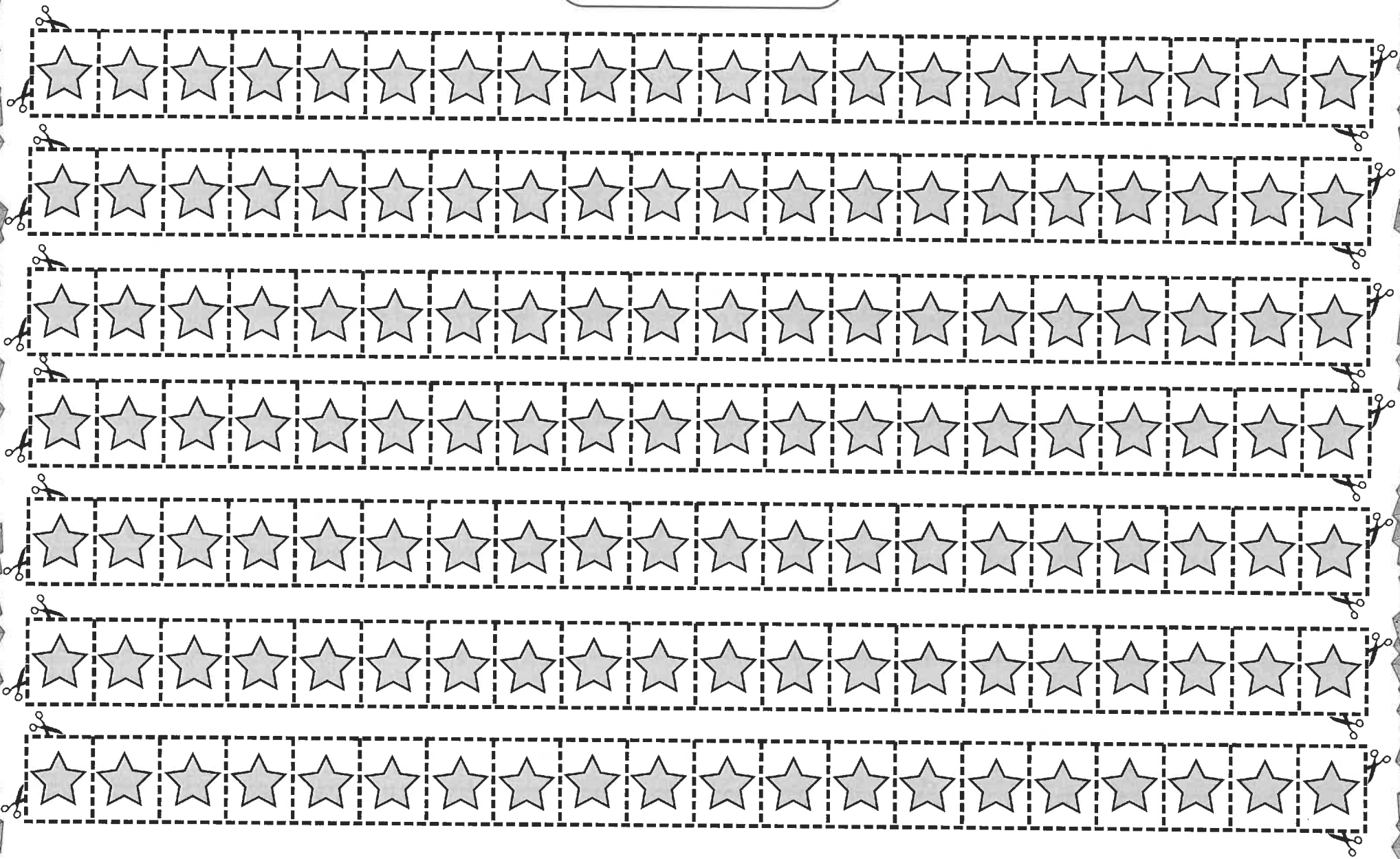




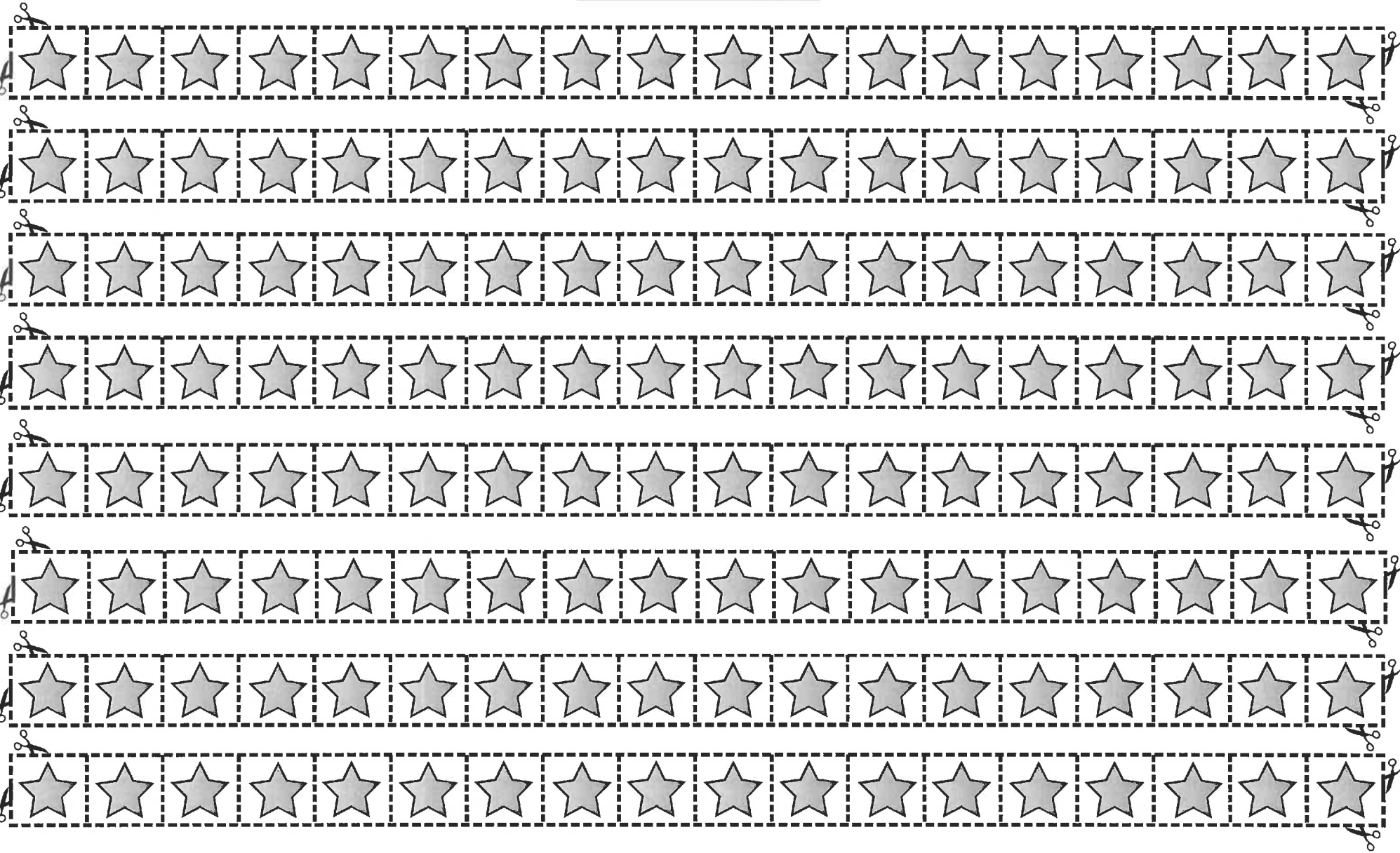




A Bit Stuck?
Fraction facts



A Bit Stuck?
Fraction facts



Check your understanding
Questions

Draw a bar diagram to represent each problem.

i. $^1/_3$ of 84
ii. $^1/_5$ of 215
iii. $^1/_7$ of 315

Now find each answer...

List all possible unit fractions of the following numbers:

35 48 60 100

Fold here to hide answers:

Check your understanding
Answers

Draw a bar diagram to represent each problem.

$^1/_3$ of 84 = 28

84		
28	28	28

$^1/_5$ of 215 = 43

215				
43	43	43	43	43

$^1/_7$ of 315 = 45

315						
45	45	45	45	45	45	45

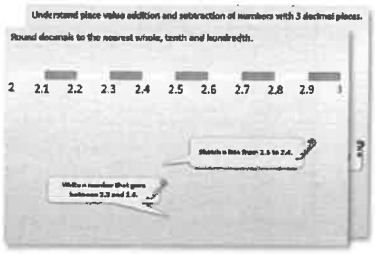
List all possible unit fractions of the following numbers:

35 $^1/_5$, $^1/_7$, $^1/_{35}$
48 $^1/_2$, $^1/_3$, $^1/_4$, $^1/_6$, $^1/_8$, $^1/_{12}$, $^1/_{16}$, $^1/_{24}$, $^1/_{48}$
60 $^1/_2$, $^1/_3$, $^1/_4$, $^1/_5$, $^1/_6$, $^1/_{10}$, $^1/_{12}$, $^1/_{15}$, $^1/_{20}$, $^1/_{30}$, $^1/_{60}$
100 $^1/_2$, $^1/_4$, $^1/_5$, $^1/_{10}$, $^1/_{20}$, $^1/_{25}$, $^1/_{50}$, $^1/_{100}$

Year 5: Week 2, Day 5
Find non-unit 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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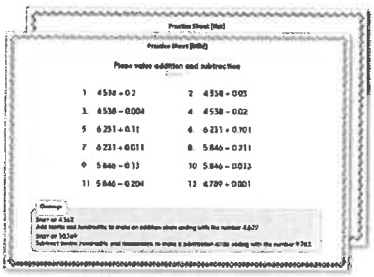
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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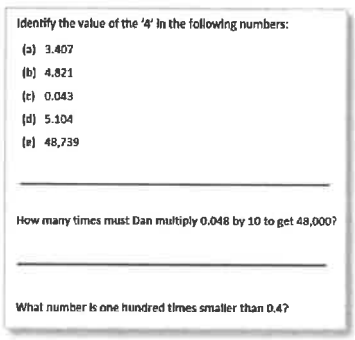
3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**

---

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



Learning Reminders

Use mental division and **multiplication** strategies to find fractions of amounts.

What other fractions of 150 can we find which give whole-number answers?

HINT! Finding factors of 150 is helpful...

$^1/_2$ of 150 = _____

$^1/_3$ of 150 =

$^1/_5$ of 150 =

$^1/_{10}$ of 150 =

$^1/_{30}$ of 150 =

$^1/_{50}$ of 150 =

Learning Reminders

Use mental division and multiplication strategies to find fractions of amounts.

$\frac{1}{6}$ of 150

Divide 150 by 6 to find the answer...

$\frac{1}{6}$ of 150 =

$$6\overline{)15^{3}0}\quad 25$$

So, how could we calculate $\frac{5}{6}$ of 150?

We could multiply 25 by 5, or subtract 25 from 150.
Do both to check that you get the same answer...

150					
25	25	25	25	25	25

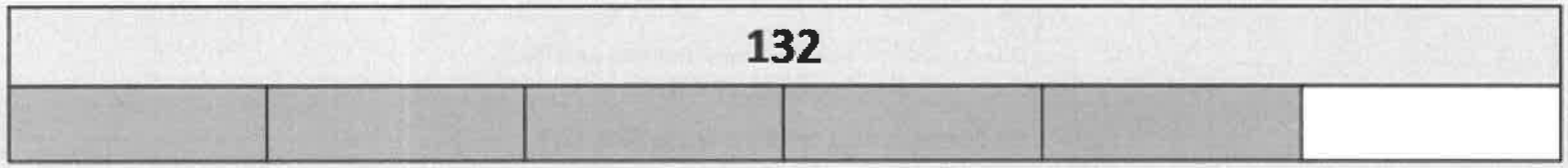
$\frac{5}{6}$ of 150 = 125

Learning Reminders

Find non-unit fractions of amounts.

$^{5}/_{6}$ of 132

Write several sentences to describe a process to calculate this, *then* read the box below.



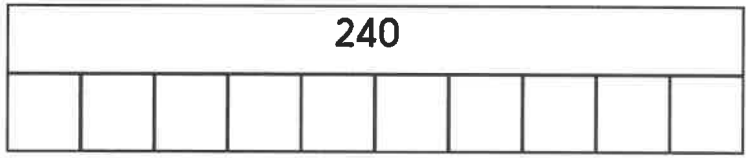
To find a non-unit fraction of an amount we:

- **Look at the denominator of the fraction and divide the whole amount into this number of *parts*. This gives the amount of the unit fraction.**
  In our example, $^{1}/_{6}$ of 132 = 132 ÷ 6 = 22
- **Multiply by the numerator – the number of parts – to give the non-unit fraction of the amount.**
  In our example, 22 × 5 = 110
- **Check that the answer seems reasonable.**

Practice Sheet Mild

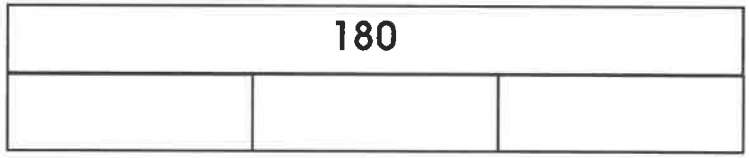
Finding fractions of amounts

1. $\frac{1}{10}$ of 240



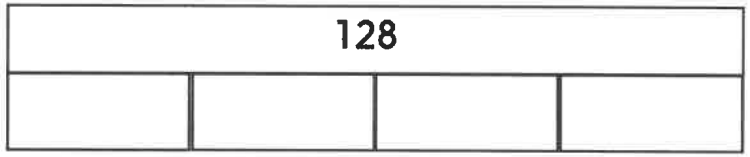
$\frac{3}{10}$ of 240

2. $\frac{1}{3}$ of 180



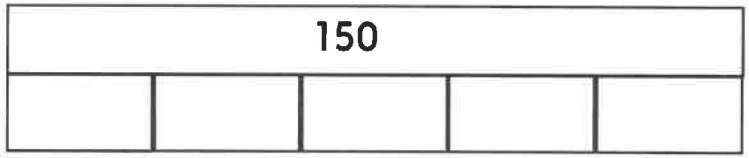
$\frac{2}{3}$ of 180

3. $\frac{1}{4}$ of 128



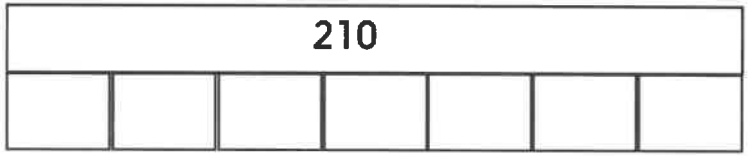
$\frac{3}{4}$ of 128

4. $\frac{1}{5}$ of 150



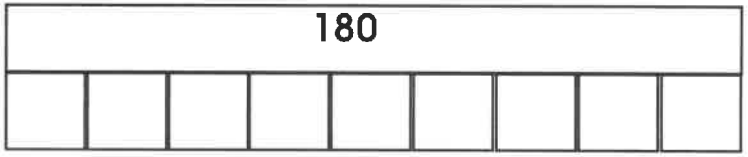
$\frac{4}{5}$ of 150

5. $\frac{1}{7}$ of 210



$\frac{3}{7}$ of 210

6. $\frac{1}{9}$ of 180



$\frac{4}{9}$ of 180

Practice Sheet Mild
Solving word problems

1. There are 210 children in a school. There are 7 classes with the same number of children in each class. How many are in each class?

2. School dinners cost £2.25 per child per day. How much does it cost a child for one week of dinners?

3. Out of 148 children having school dinners, $\frac{1}{2}$ chose pasta, $\frac{1}{4}$ chose jacket potatoes and the rest chose curry. How many children chose curry?

4. The area of each classroom is 42m^2. What is the total area of all 7 classrooms?

5. Of the 120 children in KS2, $\frac{3}{4}$ have got their 25m swimming badge. How many have yet to swim far enough to earn their badge?

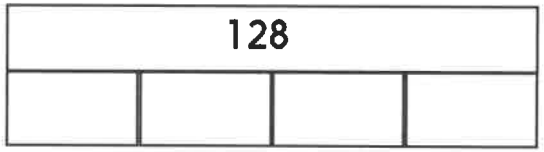
6. Children are in school $6\frac{1}{4}$ hours each day. How many hours are they in school during one week of five days?

7. A sponsored spell has raised £280 for wet play games. This will be split evenly between the 7 classes. How much will each class get to spend?

Practice Sheet Hot

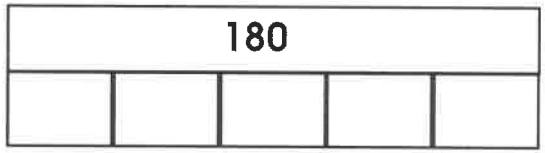
Finding fractions of amounts

1.



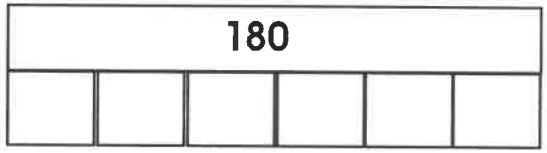
$\frac{3}{4}$ of 128

2.



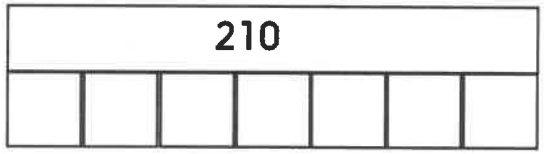
$\frac{2}{5}$ of 180

3.



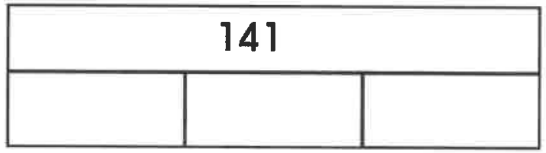
$\frac{5}{6}$ of 180

4.



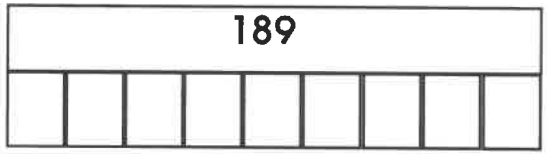
$\frac{6}{7}$ of 210

5.



$\frac{2}{3}$ of 141

6.



$\frac{7}{9}$ of 189

7. $\frac{5}{6}$ of 192

8. $\frac{3}{8}$ of 192

9. $\frac{5}{7}$ of 224

10. $\frac{5}{8}$ of 100

Practice Sheet Hot
Solving word problems

1. There are 208 children in a school. 28 are in reception, the rest are split equally between 6 classes. How many are in each class?

2. School dinners cost £2.25 per child per day. How much does it cost a child for 190 days' dinners?

3. Out of 144 children who have school dinners, $\frac{1}{3}$ chose pasta, $\frac{1}{4}$ chose jacket potatoes and the rest chose curry. How many chose curry?

4. The area of each of the 7 classrooms is 42m^2. The hall has an area of 70m^2, and the offices and reception area is 18m^2. If the whole area of the school is 400m^2, what is the area of the corridor?

5. Of the 120 children in KS2, $\frac{1}{5}$ have not got a swimming badge yet, half of the rest have got their 25m badge, and the remaining children have their 25m badge and 50m badge. How many children have just one badge so far?

6. Children are in school $6\frac{1}{4}$ hours a day. How many hours are they in school in a term of 60 days?

7. A sponsored spell has raised £343 for wet play games. This will be split evenly between the 7 classes. How much will each class get to spend?

Practice Sheets Answers

Finding fractions of amounts (mild)

1.	$\frac{1}{10}$ of 240 is 24	$\frac{3}{10}$ of 240 is 72
2.	$\frac{1}{3}$ of 180 is 60	$\frac{2}{3}$ of 180 is 120
3.	$\frac{1}{4}$ of 128 is 32	$\frac{3}{4}$ of 128 is 96
4.	$\frac{1}{5}$ of 150 is 30	$\frac{4}{5}$ of 150 is 120
5.	$\frac{1}{7}$ of 210 is 30	$\frac{3}{7}$ of 210 is 90
6.	$\frac{1}{9}$ of 180 is 20	$\frac{4}{9}$ of 180 is 80

Solving word problems (mild)

1. There are 30 children in each class.
2. School dinners cost £11.25 for one week.
3. 37 children chose curry.
4. The total area of all 7 classrooms is 294m^2.
5. 30 children have not yet got their 25m swimming badge.
6. Children are in school for 31$\frac{1}{4}$ hours during one week.
7. Each class will have £40 to spend.

Finding fractions of amounts (hot)

1. $\frac{3}{4}$ of 128 is 96
2. $\frac{2}{5}$ of 180 is 72
3. $\frac{5}{6}$ of 180 is 150
4. $\frac{6}{7}$ of 210 is 180
5. $\frac{2}{3}$ of 141 is 94
6. $\frac{7}{9}$ of 189 is 147
7. $\frac{5}{6}$ of 192 is 160
8. $\frac{3}{8}$ of 192 is 72
9. $\frac{5}{7}$ of 224 is 160
10. $\frac{5}{8}$ of 100 is 62.5

Solving word problems (hot)

1. There are 30 children in each non-reception class.
2. School dinners cost £427.50 for 190 days.
3. 60 children chose curry.
4. The area of the corridor is 18m^2.
5. 48 children have one swimming badge so far.
6. Children are in school for 375 hours during one term.
7. Each class will have £49 to spend.

A Bit Stuck?
Fraction facts

Use this activity to support learning for both today and tomorrow (Week 2 Day 5)

Work in pairs, but write your answers on your own sheet

What to do:

- Work out what number needs to go in each empty section of the bar model. Then write a list of fraction facts to go with each.

Things you will need:
- A pencil

12			

12		

¼ of 12 is

½ of 12 is

¾ of 12 is

4/4 of 12 is

⅓ of 12 is

⅔ of 12 is

3/3 of 12 is

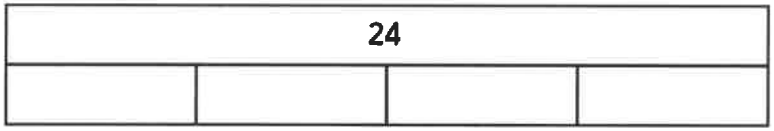
- Choose at least four other bar models. Work out what number needs to go in each empty section of the bar model. Then write a list of fraction facts to go with each.

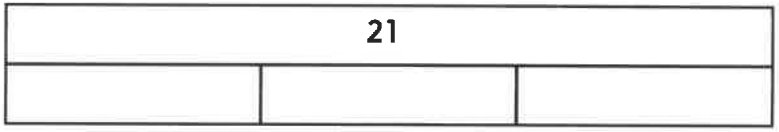
S-t-r-e-t-c-h:

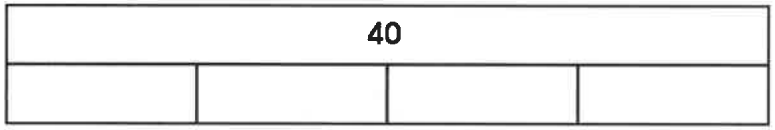
Draw your own bar models to show ⅓s of 15 and ¼s of 28.

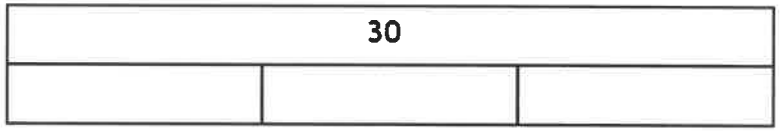
Learning outcomes:
- I can use bar models to find ⅓s, ¼s and ⅕s of numbers.
- I am beginning to draw my own bar models to find fractions of amounts.

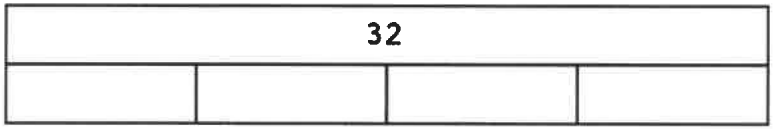
A Bit Stuck?
Fraction facts

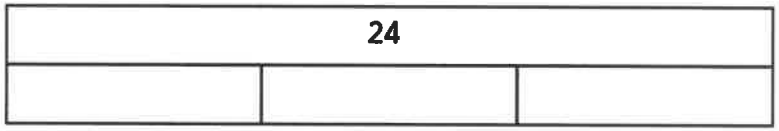


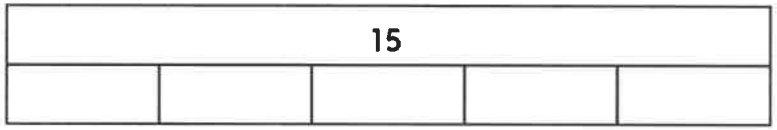


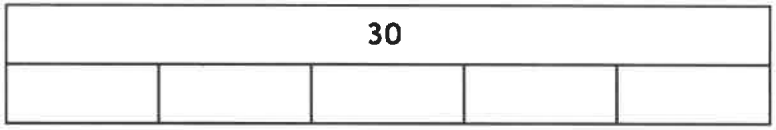


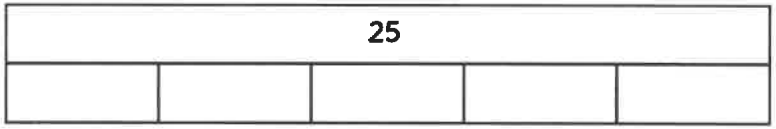




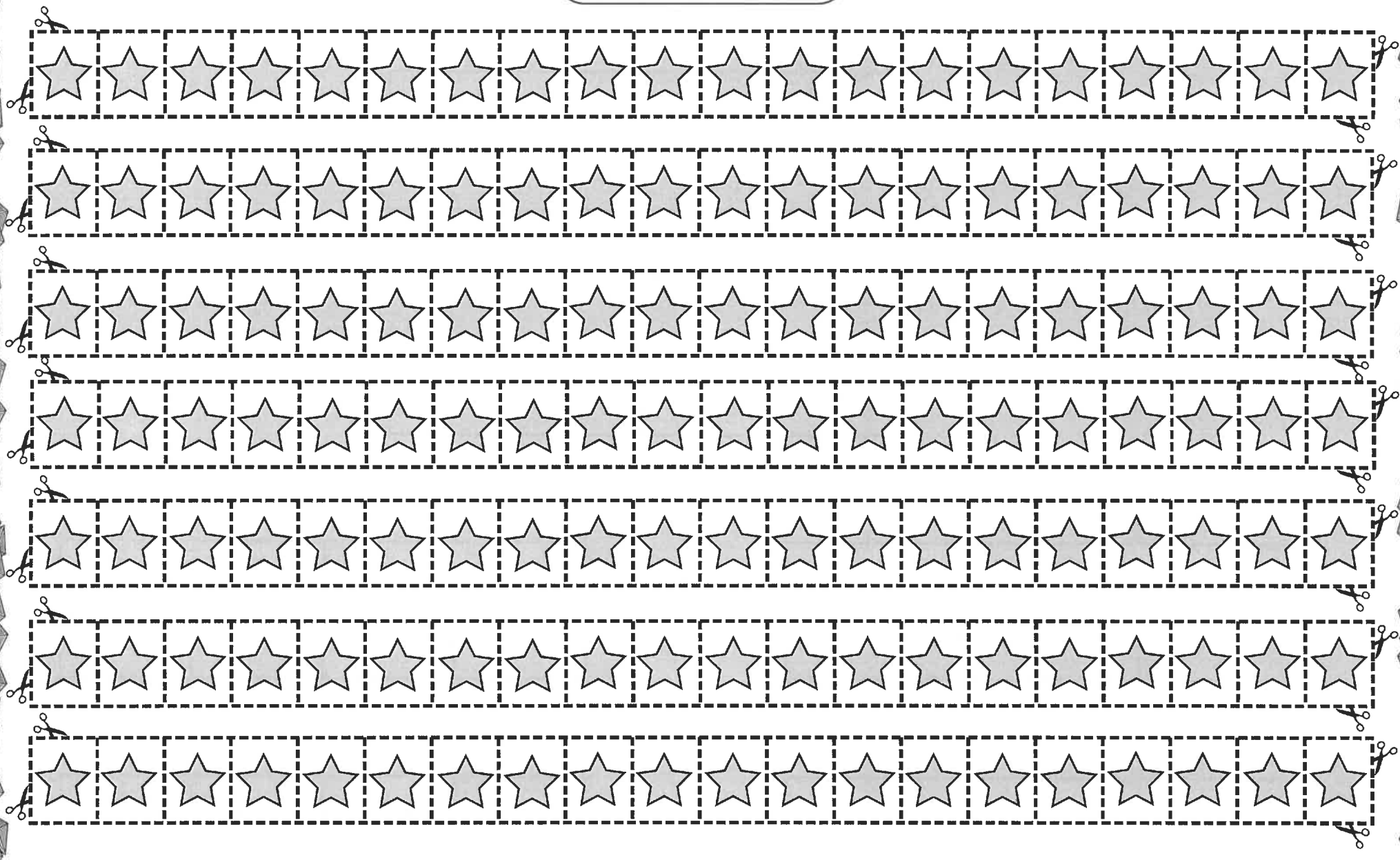




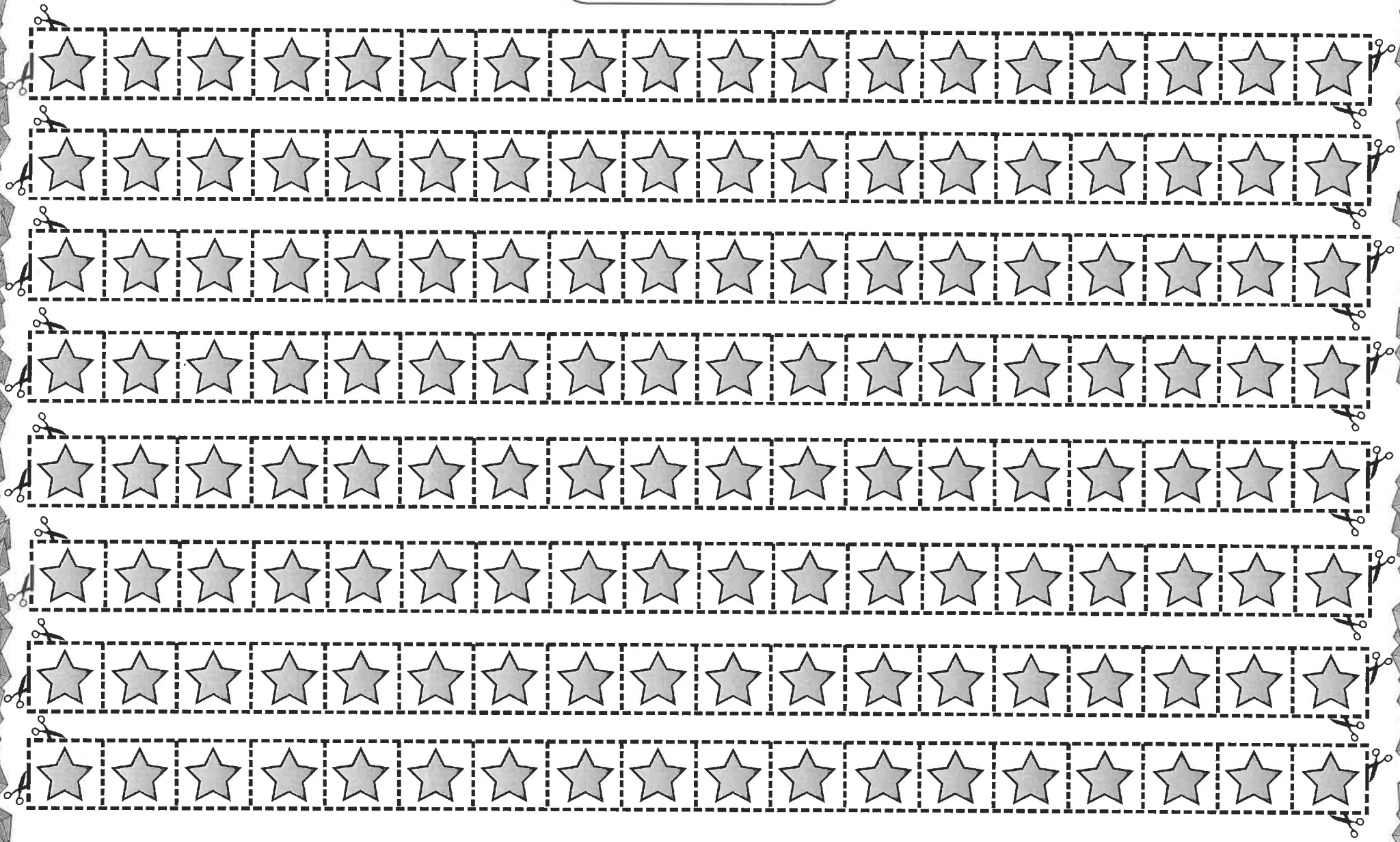




A Bit Stuck?
Fraction facts



A Bit Stuck?
Fraction facts



Check your understanding
Questions

Draw a bar diagram to represent each problem.

i. $^1/_3$ of 153
ii. $^4/_6$ of 612
iii. $^7/_{12}$ of 72

Now find each answer.

Find $^3/_5$ of each of: (a) 105 (b) 205 (c) 305

Use the pattern to predict the answer to $^3/_5$ of 405.
Check your answer.

Fold here to hide answers:

Check your understanding
Answers

Draw a bar diagram to represent each problem.

i. $^1/_3$ of 153 = **51**

153		
51	51	51

ii. $^4/_6$ of **612** = 4 x 102 = **408**

612					
102	102	102	102	102	102

iii. $^7/_{12}$ of **72** = = 7 x 6 = **42**

72											
6	6	6	6	6	6	6	6	6	6	6	6

Find $^3/_5$ of each of ...

(a) 105 **63** (b) 205 **123** (c) 305 **183**

Use the pattern to predict the answer to $^3/_5$ of 405. **243**
As the numbers increase by 100, the answers increase by 60 which is $^3/_5$ of 100.

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Watch an animation of the book 'Tuesday'

- Watch the animation all the way through.
  https://www.youtube.com/watch?v=A6Uvxjsooik
- Use the *Storyboard* to draw and write notes about the main events.

2. Revise Modal Verbs

- Use the *Revision Card* to remind you about Modal Verbs.
- Look at the picture of *Rusty and the Frogs*. Read the six questions on *Think and Write* and think about your answers.
- Write sentence answers that use modal verbs.

3. Now for some writing

- Think about who you would interview if you were a detective finding out about what had happened. Choose one person from the *Interview Priorities* list.
- Write the questions that you would ask this person on one page of the *Detective Notebook*.
- Imagine their answers and write these on the other page.

Try these Fun-Time Extras

- Watch a longer animation of the story. Which do you prefer?
  https://www.youtube.com/watch?v=lV5LOHdrdP8
- Use your Storyboard to try to tell the story of Tuesday to somebody else

Storyboard

1st	2nd	3rd
4th	4th	6th

Revision Card – Modal Verbs

Modal Verbs

Modal verbs express **certainty, ability** or **obligation.**

Certainty	**Ability**	**Obligation**
may	can	must
might	could	should
would		ought
shall		
will		

Indicating Ability using Modal Verbs

Pigs might **fly.**

Pigs would **fly.**

Pigs can **fly.** ✓

Pigs must **fly.**

*Which sentence indicates **ability**?*

Using Modal Verbs to Express Certainty

Modal verbs are useful for reporting when the **facts are not certain...**

The frogs may be looking for a new home.

The frogs might return.

...and for showing when they are.

Flying pigs would cause more chaos.

We will keep our windows shut next Tuesday!

Using Modal Verbs to Express Obligation

Modal verbs are useful for including **opinion** in a report.

The frogs must be stopped.

I should be safe to leave my washing out at night.

The council ought to pick up all of the lily pads.

They are more commonly found in informal opinion-piece reports and in **direct speech** quotations from people interviewed.

Rusty and the Frogs Picture

Modal Verbs – Think and Write

What different things might Rusty (the dog) go and do next?

What might the frogs do next?

What will the Rusty's owner notice in the morning?

What action will they take?

How could this have turned out differently?

What advice would you give to Rusty and his owner?

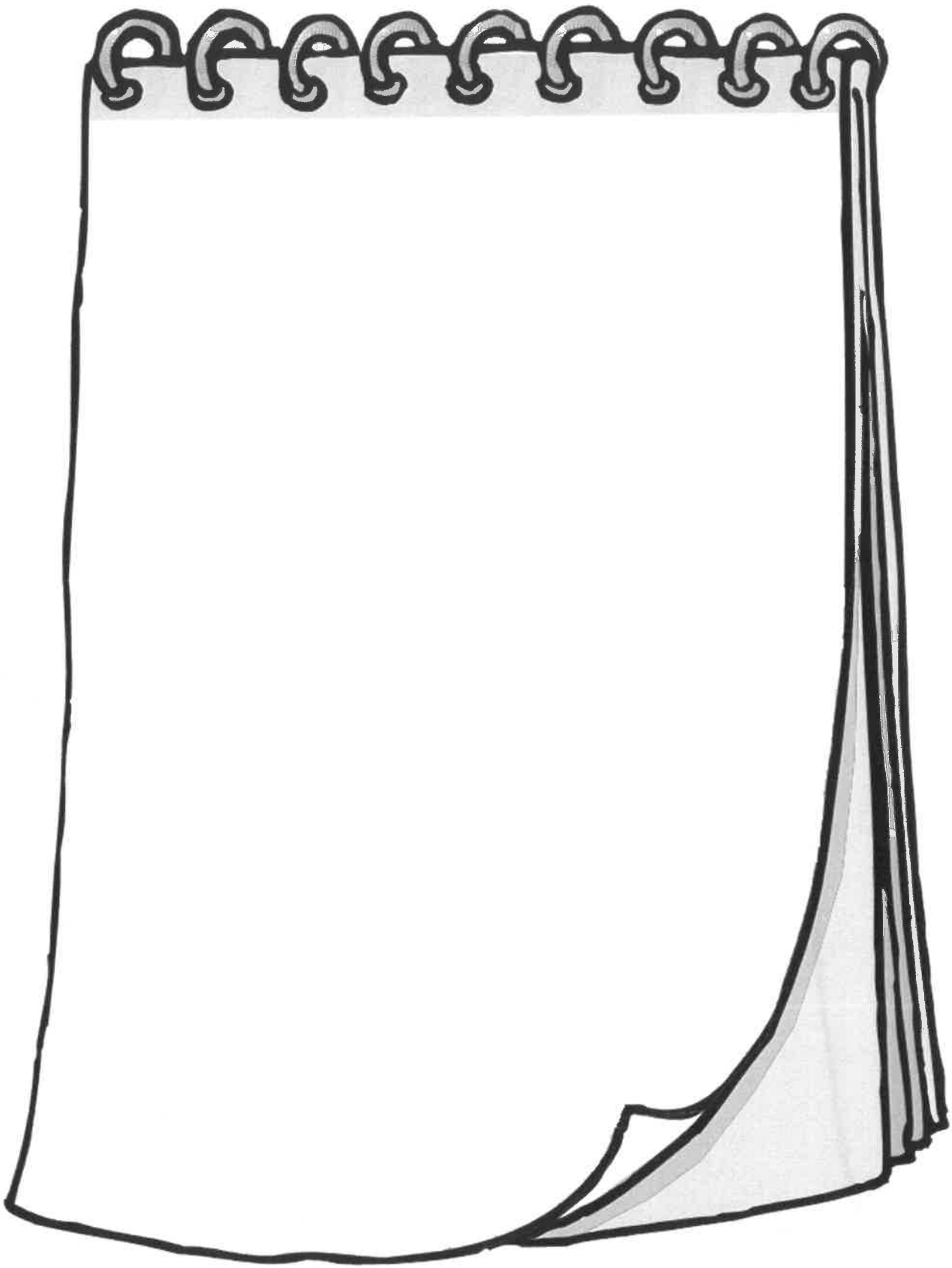
Now write your answers. Use one of the modal verbs in each of your sentences:

- *may*
- *might*
- *would*
- *shall*
- *will*
- *can*
- *could*
- *must*
- *should*
- *ought*

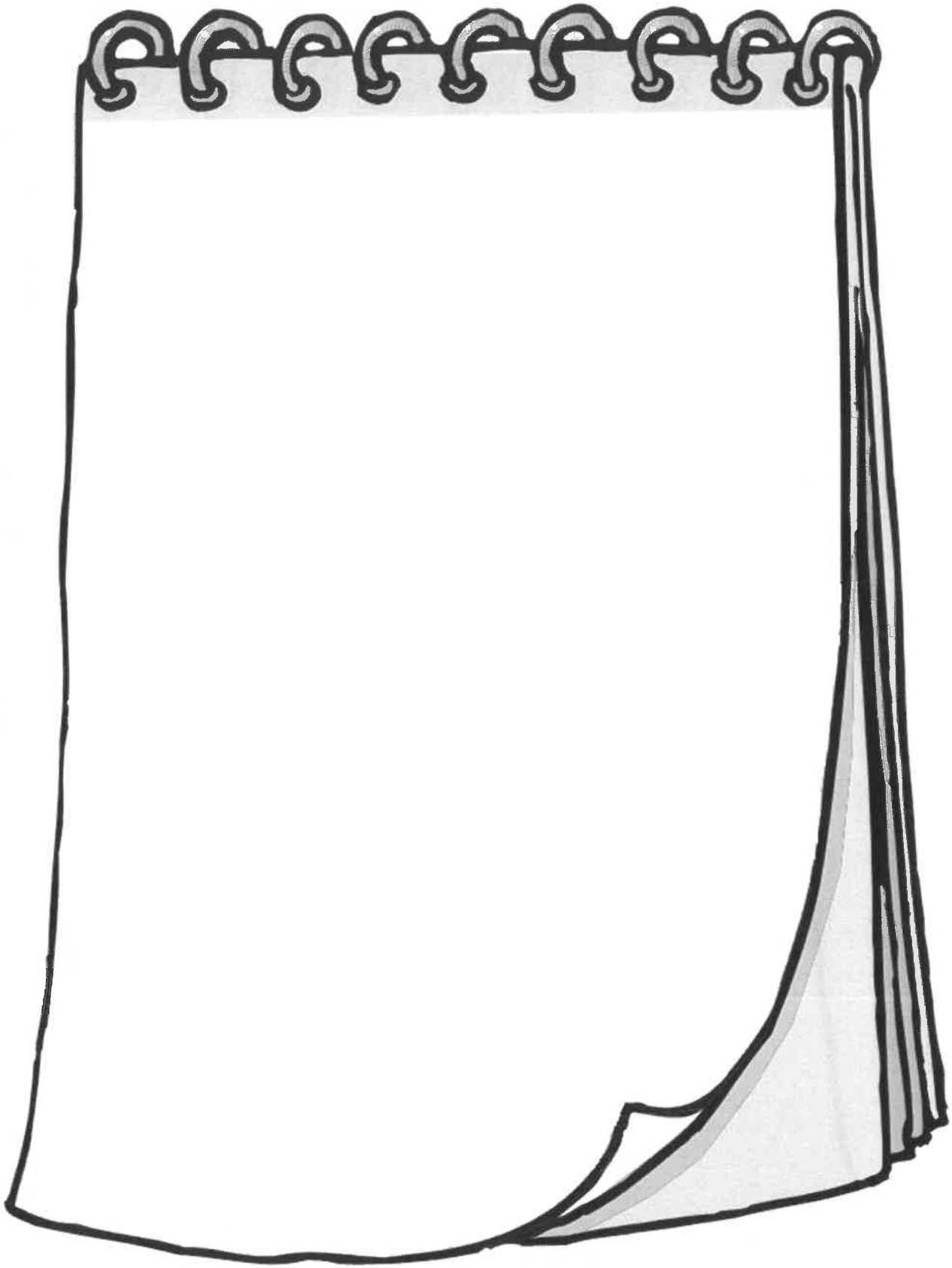
Interview Priorities

- The man recorded eating his supper at 11:21pm
- The old woman sleeping in the chair with the TV on
- Any fishermen who were fishing at the pond
- An astronomer looking into the night sky
- The owner of the dog that started to bark at 4:38am
- A postman/milkman/paper boy or girl on their morning round
- A farmer out working the fields as the frogs start to fall

Detective's Notebook - Questions



Detective's Notebook - Answers



What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

IMPORTANT You need to have watched this animation from yesterday's at home work: https://www.youtube.com/watch?v=A6Uvxjsooik

1. Fill in the speech bubbles on First Flight - Blank

- Look at the picture of the frogs from Tuesday and imagine what each of them is saying. Write their speech.
- Use the rectangular box to add some writing to set the scene.

2. Revise how to punctuate direct speech.

- Read *Speech Punctuation Reminders* to help you remember how to punctuate speech.
- Read the *Harltown Report* and follow instructions.

3. **Now for some writing**

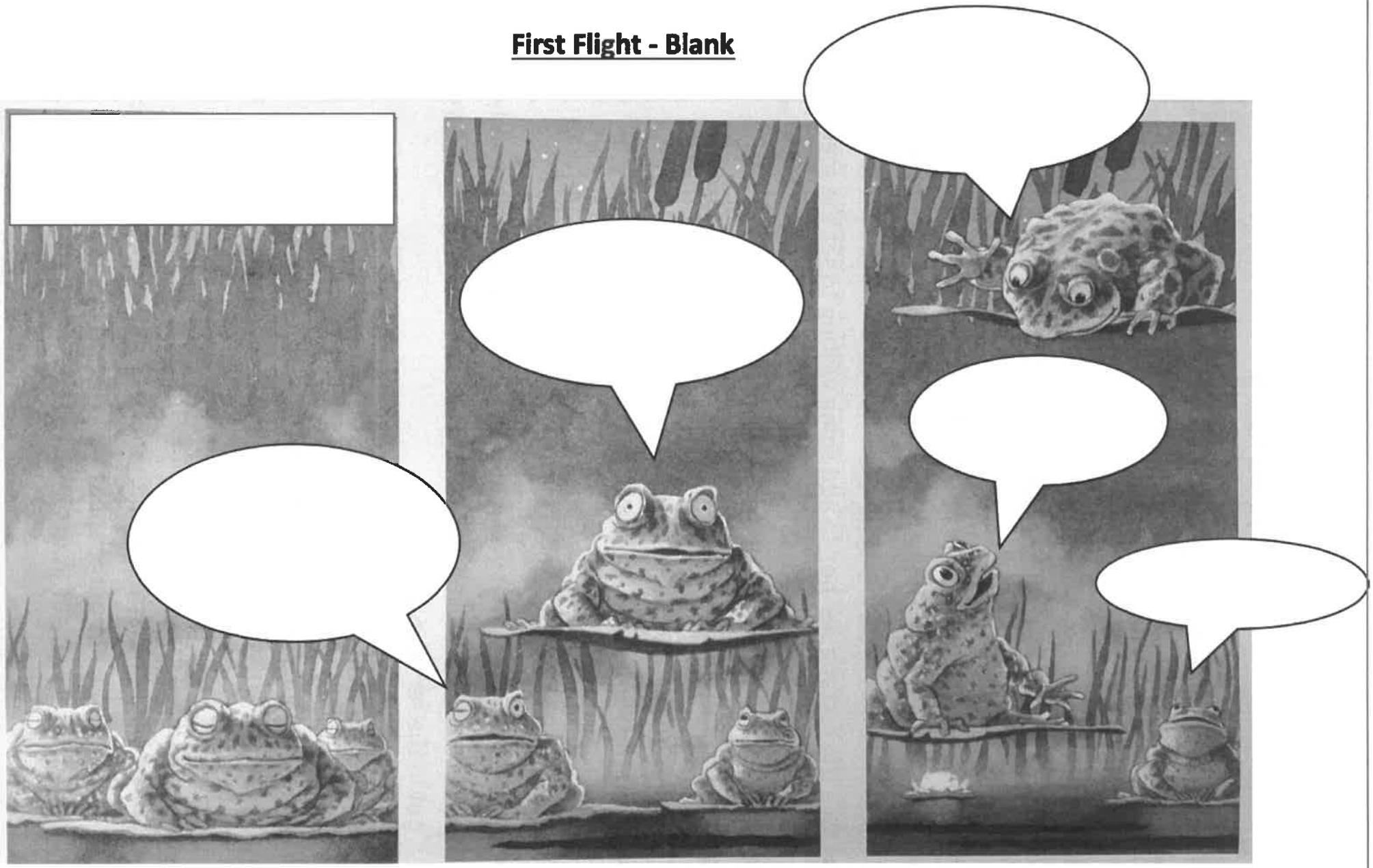
- Write the speech that you made up for the frogs into properly punctuated sentences. You could start with the writing that you put in the rectangular box.
- Remember a new line for each new speaker.

Well done! Now, ask a grown-up to check your writing with you, using *Speech Punctuation Reminders.*

Try the Fun-Time Extra

- Try carrying on the story - either as a comic-strip or as prose writing. Think about the speech you use as you do.

First Flight - Blank



Speech Punctuation Reminders

- Do you have speech marks at the start and the end of the words being spoken?
- Do you have a capital letter at the start of the speech?
- Do you have punctuation inside the speech marks?
- Have you started a new line each time someone new starts speaking?
- Have you remembered to add commas?
- Have you used synonyms for the word said?

Harltown Report

The townspeople of Harltown are still struggling to make sense of the extraordinary events of Tuesday evening, when, it would seem, they were witness to a rare and troubling phenomenon.

I spoke with the man at the centre of the events, Mr. Cunningham, whose late-night snack time was neither peaceful nor normal.

I asked him to tell me what he had seen.

"Well, like I told the others, I was just sitting at my kitchen table, about to eat my sandwich, when I noticed that the light in the kitchen had changed colour," he explained. "It took on a kind of greenish tone. I was pretty surprised, I have to tell you. And of course, like anyone would, I glanced out of the window and that's when I saw them"

He went, on growing louder as he spoke, "Hundreds of things! All green and hunched up and floating past, like it was the most natural thing in the world!"

I carefully asked exactly what he thought these green 'things' were.

"Frogs! Hundreds of frogs. Floating frogs, I tell you. Flying by on lily-pads. Frogs on lily-pads! Right up against my window. One even waved at me!" he reported, growing agitated.

He then repeatedly muttered to himself, "A flight of floating frogs. A flight of floating frogs..."

- Write on the text to show how the speech has been punctuated.
- Try to show: speech marks, capital letters, punctuation inside the speech marks, commas, synonyms and phrases for the word 'said'.

First Flight

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. **Read the three Newspaper Articles**

- Read **Features to watch out for in a newspaper report**
- Read the three newspaper articles: *Zebra*, *Stage-School* and *Flower-beds*.
- Choose one of the articles and make notes on it to show some of the features

2. **Answer questions about the articles**

- Choose one of the articles and answer the *Questions* for it.
- Choose another of the articles and answer its questions too.

Well done! Now, talk with a grown-up about your answers. These are at the end of the pack.

3. **Now for some writing**

- Look at the picture titled 'Next Tuesday'
- Plan a newspaper article about this event on *Newspaper Article Paragraph Planner*.
- Write your newspaper article, remembering the *Features to watch out for*.

Try these Fun-Time Extras

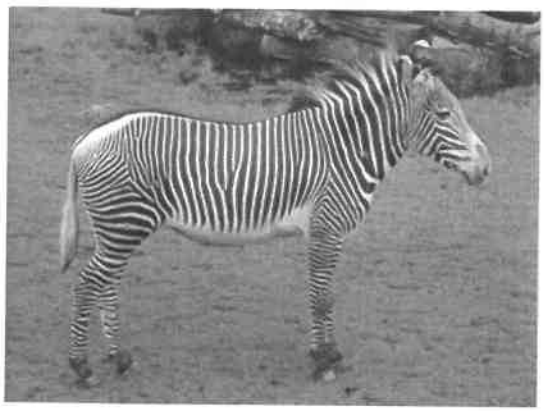
- Draw some pictures that could accompany your newspaper article.
- Think of what could happen next Tuesday. What will float next. Make up five ideas, choose your favourite and draw it or make up a story about it.

Features to watch out for in a newspaper report

- Attention-grabbing headline.
- Factual – giving information, answering the questions: Who? What? Where? When? How?
- Keeping the story exciting and the pace fast so the reader does not get bored.
- Clear sentences, not too long and complicated.
- Direct quotes from witnesses or reported speech where a direct quote has not been obtained.
- Short paragraphs to break up the text.
- Clear conclusions.
- Style – can be chatty or formal.

Chatty	Formal
• Direct speech. • Active voice to say exactly who did what. • Shorter sentences. • Informal language (e.g. contractions such as 'don't' or 'wouldn't').	• Reported speech. • Passive voice to avoid saying who or what was the cause. • Longer sentences. • Formal language with no shortened forms.

Zoo Zebra in Co-op Car Park Caper



Molly the zebra safely back at the zoo last

A runaway zebra caused chaos yesterday as it tried to avoid capture in the seaside town of Lindley in Dorset. The zebra had escaped at dawn from the nearby children's zoo in Briarley Wood.

The beautiful stripy mare was first spotted in the car park of the Co-op supermarket in Westray Street where it came to the attention of two local women; the pair had set out early to do their regular Friday morning shop. "At one point the zebra was coming towards us," said retired nurse Sally Stern. "When it reared up on its hind legs, my friend and I were scared its hooves would hit us in the face."

Once supermarket staff realised the animal was on their site, they quickly contacted the local RSPCA, who traced the animal to Briarley Wood Children's Zoo. The RSPCA rescue squad were at the Co-op within ten minutes of taking the call – only to find that their stripy quarry had disappeared.

The next sighting of the zebra was outside Claire's Gift Shop. Eye-witnesses say the animal looked as if she wanted to go inside. However, the loud noise of a nearby drill frightened her away – this time towards the park.

It was in Lindley's Memorial Park that the zebra was finally captured by the RSPCA rescue squad. Children and parents in the park were alarmed at the sight of the now panic-stricken animal, but police officers quickly sealed off the area so that RSPCA staff were able to sedate the zebra and return her to the zoo.

Local RSPCA Director Alf Crawley said that questions will be asked about the careless security arrangements at Briarley Wood Zoo. He expressed surprise that, until the RSPCA informed them, staff at the zoo were unaware the zebra had escaped. A spokesperson for the zoo was unavailable for comment.

It's curtains up for new stage school!

Hayley Turnpike from Tinksbury

Mayor Joe Lavinski

Tinksbury is to have a new stage school, thanks to the generosity of talented actress Hayley Turnpike, it was announced yesterday. The stage school will be built in the Greenside area of the town, close to the industrial park.

Hayley lived the first twenty years of her life in the town, before moving to Los Angeles to pursue an acting career in Hollywood. She is best known for her starring role in the Carrie Spotter series of films. This won her an Oscar last year and has made her the UK's richest woman under 30.

The decision to build the £10 million stage school was made public yesterday during Hayley's visit to her family who still live in Lower Tinksbury. With characteristic modesty, Hayley declined to be interviewed herself, but a spokesperson for the actress confirmed that the exciting project will go ahead. Her publicity manager, Hal Brent, said that Hayley does not want a big fuss made about her involvement in this venture, adding that she had loved living in the area and wanted to give something back for future generations of young people.

An ecstatic Mayor Joe Lavinski was photographed on the steps of the town hall giving details to the press about the stage school. "We are delighted to confirm that a new stage school is to be built in Tinksbury next year. There will be full-time places for fifty 16-21 year-olds with many other acting, singing and dancing classes available. In accordance with the wishes of our generous benefactor, preference will be given to talented youngsters from our local area." It is understood – or hoped – that after the school is built, Ms Turnpike will continue to fund the school annually.

Rumours about this project have abounded for many months now; some people thought an announcement would be made last Christmas. Others felt it would never happen. Nevertheless, on this occasion, rumours have proved to be correct and there can be no doubt that the future looks bright for stage-struck youngsters who hope to follow in the famous footsteps of their heroine Hayley Turnpike.

Mystery flower beds while you sleep

Residents of the town of Aldeymarsh in Lincolnshire do not know whether to be concerned or grateful for a series of visits the town has been receiving during the night over the last month. So far no fewer than eleven lucky householders have woken to find that their gardening has been done for them while they were sleeping.

Tasks carried out included: hedge cutting, weeding, edge trimming and even lawn mowing; most of the homes involved have also had new flowers and shrubs planted. Mother-of-two 28-year-old Anna Gagney of Romney Close said that last Tuesday, when she when she went to bed, her front garden was full of weeds. The following morning all the weeds had been removed and she was delighted to find that about twenty substantial flowering bushes had been planted -neatly and expertly - in her previously overgrown flower beds.

Most of the residents who have received the free garden makeovers are delighted with the results. Senior citizen Moses Oakey commented, "I'm amazed at this kindness. You don't usually get something for nothing these days." His neighbour, firefighter Peggy Maloney added, "I can't believe they managed to mow my grass in the dark and I didn't even hear the mower!" But accountant James Fearney does not agree. He said he found it alarming that strangers could visit his garden while he was asleep. "These people have trespassed on my property. What's more, if I want flowers in my garden I'll choose and plant them myself."

How the mystery gardeners managed to carry out so many tasks so silently in the dark has baffled local police ever since they were first made aware of the problem by James Fearney. A spokesman for Superintendent Beth Holt confirmed that police are looking into eleven cases of overnight trespass and so far, have no leads to go on. It is unknown whether the trespassers, when found, will also be charged with theft of weeds.

Anyone with any information is requested to call Aldeymarsh Police in confidence on 020023 987987.

Zoo Zebra in Co-op Car Park Caper **Question sheet**

1) How does the headline draw you in?
2) What picture is included? Is there a caption? What does the picture add to the story?
3) Does the first paragraph answer the questions: **Who? What? When? Where?**
4) In 2 or 3 words, what is each paragraph about?
5) Does the final paragraph bring the story up to the present or look to the future?
6) What do the following words mean: ***quarry, panic-stricken, sedate, expressed surprise?*** How can you work them out if you don't know?
7) Can you find some facts from the article? Can you find words which show the writer's opinion?
8) Who has been interviewed?
9) Are the interviews in direct or reported speech? How can you tell?
10) Can you find anywhere the writer has used a semi-colon?
11) Is the style chatty or formal?
12) Did you find the article a) informative and b) entertaining?

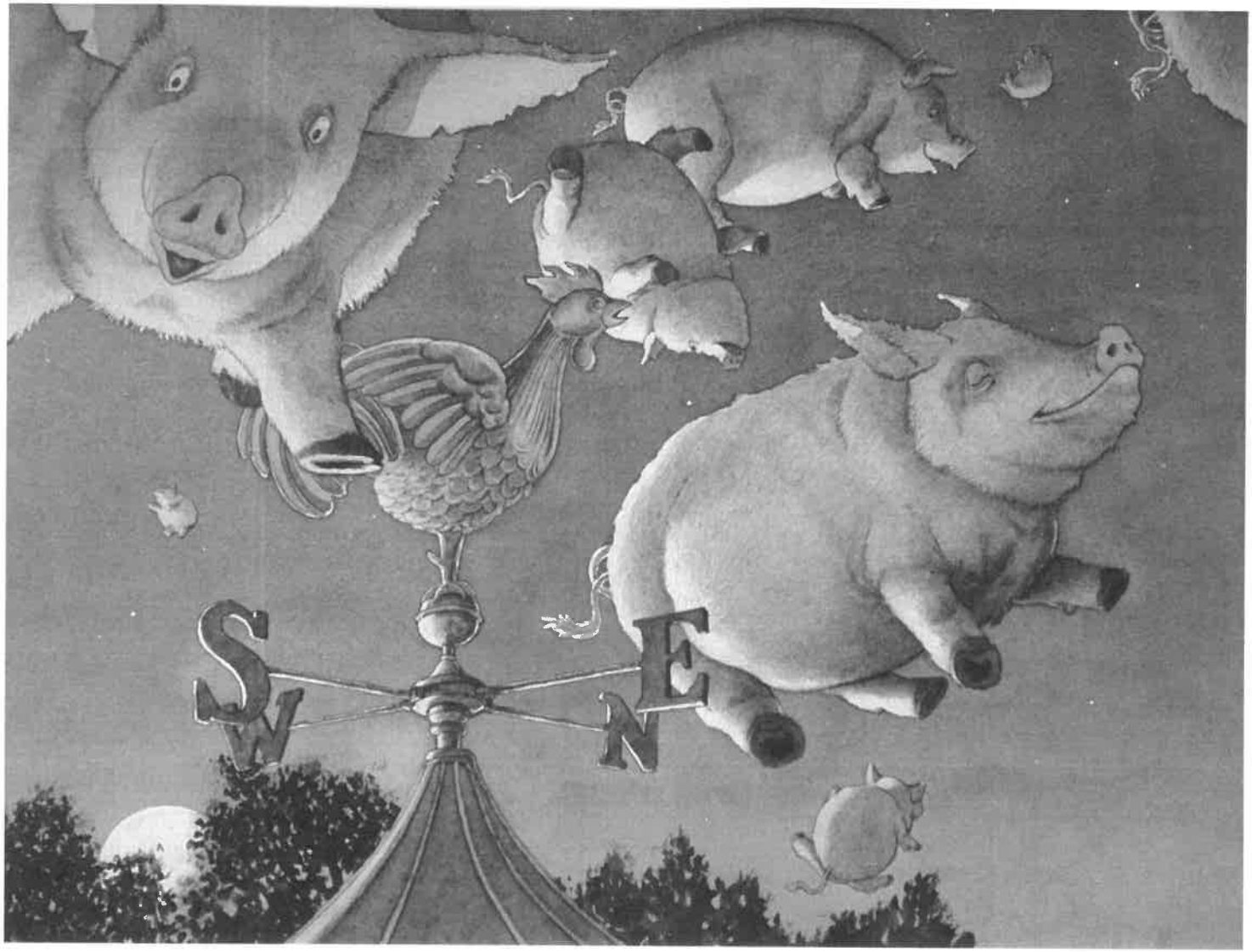
It's Curtain Up for New Stage School! **Question sheet**

1. Why would people read this article?
2. Headlines often play with language using devices such as puns, alliteration, rhyme, references to well-known sayings, book titles etc. What does this one do?
3. What picture(s) is / are included? Is there a caption? What does the picture add to the story?
4. Does the first paragraph answer the questions: Who? What? When? Where? (This is often called the orientation of the article as it helps to 'orientate' the reader, i.e. 'put them in the picture'.)
5. In 2 or 3 words, what is each paragraph about?
6. Does the final paragraph bring the story up to the present or look to the future? (This is often called the reorientation because it helps leave the reader with a good idea of 'what might happen now'.)
7. What do the following words mean: *pursue, characteristic modesty, confirmed, venture, ecstatic, benefactor, abounded, stage-struck, declined to be interviewed?* How can you work them out if you don't know?
8. Find some facts from the article. Often news articles contain opinion. Can you find any words in this which show the writer's opinion?
9. Who has been interviewed? (Interviews are usually with someone involved or affected / eyewitness / expert on relevant topic / spokesperson for relevant group.)
10. Are the interviews in direct or reported speech? How can you tell? (Look for use of 1st or 3rd person, present or past tense, speech marks or no speech marks, but above all whether it is the actual words spoken.) Do you prefer the direct or reported speech? Why?
11. Can you find anywhere the writer has used a semi-colon? Can you find another place where the writer might have used a semi-colon to join two closely connected sentences?
12. Is the style chatty or formal? (Find some examples of, reported or direct speech, the use of informal 'chatty' language or the use of formal, quite 'dry' language to help you decide what style the article is written in.)
13. Did you find the article a) informative and b) entertaining?

Mystery Flower Beds while you Sleep **Question sheet**

1) Why would people read this article?
2) Headlines often play with language using devices such as puns, alliteration, rhyme, references to well-known sayings, book titles etc. What does this one do?
3) Does the first paragraph answer the questions: Who? What? When? Where? (orientation)
4) In 2 or 3 words, what is each paragraph about?
5) Does the final paragraph bring the story up to the present or look to the future? (reorientation)
6) What do the following words mean: *alarmed, inhabitants, substantial, trespassed, baffled, in confidence?* How can you work them out if you don't know?
7) Find some facts from the article. Can you find any words in this which show the writer's opinion?
8) Who has been interviewed? (someone involved or affected / eyewitness / expert on relevant topic / spokesperson for relevant group)
9) Are the interviews in direct or reported speech? How can you tell? (Look for use of 1st or 3rd person, present or past tense, speech marks or no speech marks, but above all whether it is the actual words spoken.)
10) Can you find anywhere the writer has used a semi-colon? Can you find another place where the writer might have used a semi-colon to join two closely connected sentences?
11) Is the style chatty or formal? (Find some examples of reported or direct speech, use of informal 'chatty' language or use of formal, quite 'dry' language to help you decide what style the article is written in.)
12) Did you find the article a) informative and b) entertaining?

Next Tuesday



Newspaper Article Paragraph Plan

Headline	
First Paragraph *(Who, What, Where, When)*	
Paragraph 2	
Paragraph 3	
Paragraph 4	
Conclusion	

Zoo Zebra in Co-op Car Park Capers
Adult sheet with suggested prompts and answers

1) **How does the headline draw you in?** Headlines often play with language using devices such as puns, alliteration, rhyme, references to well-known sayings, book titles etc. What does this one do? *(alliteration, punchy, like a tongue-twister)*
2) **What picture(s) is / are included? Is there a caption? What does the picture add to the story?**
3) **Does the first paragraph answer the questions: Who? What? When? Where?** (This is often called the orientation of the article as it helps to 'orientate' the reader, i.e. 'put them in the picture'.)
4) **In 2 or 3 words, what is each paragraph about?**
5) **Does the final paragraph bring the story up to the present or look to the future?** (This is often called the reorientation because it helps leave the reader with a good idea of 'what might happen now'.)
6) **What do the following words mean:** ***quarry, panic-stricken, sedate, expressed surprise?*** **How can you work them out if you don't know?** *(look at the context and make a reasonable guess)*
7) **Find some facts from the article. Often news articles contain opinion. Can you find any words in this which show the writer's opinion?** *(beautiful, careless security arrangements)*
8) **Who has been interviewed?** (Interviews are usually with someone involved or affected / eyewitness / expert on relevant topic / spokesperson for relevant group)
9) **Are the interviews in direct or reported speech? How can you tell?** (Look for use of 1st or 3rd person, present or past tense, speech marks or no speech marks, but above all whether it is the actual words spoken.) Do you prefer the direct or reported speech? Why?
10) **Can you find anywhere the writer has used a semi-colon?** Can you find another place where the writer might have used a semi-colon to join two closely connected sentences? *(After Claire's gift shop)*
11) **Is the style chatty or formal?** Find some examples of opinion, reported or direct speech, the use of informal 'chatty' language or the use of formal, quite 'dry' language to help you decide what style the article is written in.
12) **Did you find the article (a) informative and (b) entertaining?**

It's Curtain Up for New Stage School!

Adult sheet with suggested prompts and answers

1. Why would people read this article?
2. Headlines often play with language using devices such as puns, alliteration, rhyme, references to well-known sayings, book titles etc. What does this one do? *(curtain up expression means to begin; this is a pun with stage)*
3. What picture(s) is / are included? Is there a caption? What does the picture add to the story?
4. Does the first paragraph answer the questions: Who? What? When? Where? (This is often called the orientation of the article as it helps to 'orientate' the reader, i.e. 'put them in the picture'.)
5. In 2 or 3 words, what is each paragraph about?
6. Does the final paragraph bring the story up to the present or look to the future? (This is often called the reorientation because it helps leave the reader with a good idea of 'what might happen now'.)
7. What do the following words mean: *pursue, characteristic modesty, confirmed, venture, ecstatic, benefactor, abounded, stage-struck, declined to be interviewed?* How can you work them out if you don't know? *(Look at the context and make a reasonable guess)*
8. Find some facts from the article. Often news articles contain opinion. Can you find any words in this which show the writer's opinion? *(talented, ecstatic, there can be no doubt, exciting)*
9. Who has been interviewed? (Interviews are usually with someone involved or affected / eyewitness / expert on relevant topic / spokesperson for relevant group)
10. Are the interviews in direct or reported speech? How can you tell? (Look for use of 1st or 3rd person, present or past tense, speech marks or no speech marks, but above all whether it is the actual words spoken.) Do you prefer the direct or reported speech? Why?
11. Can you find anywhere the writer has used a semi-colon? Can you find another place where the writer might have used a semi-colon to join two closely connected sentences? *(*After *Carrie Spotter series of films)*
12. Is the style chatty or formal? Find some examples of active or passive voice, reported or direct speech, the use of informal 'chatty' language or the use of formal, quite 'dry' language to help you decide what style the article is written in.
13. Did you find the article a) informative and b) entertaining?

Mystery Flower Beds while you Sleep

Adult sheet with suggested prompts and answers

1) Why would people read this article?
2) Headlines often play with language using devices such as puns, alliteration, rhyme, references to well-known sayings, book titles etc. What does this one do? *(*pun on flower beds and beds you sleep in*)*
3) Does the first paragraph answer the questions: Who? What? When? Where? (This is often called the orientation of the article as it helps to 'orientate' the reader, i.e. 'put them in the picture'.)
4) In 2 or 3 words, what is each paragraph about?
5) Does the final paragraph bring the story up to the present or look to the future? (This is often called the reorientation because it helps leave the reader with a good idea of 'what might happen now'.)
6) What do the following words mean: *inhabitants, substantial, trespassed, baffled, in confidence?* How can you work them out if you don't know? *(look at the context and make a reasonable guess)*
7) Find some facts from the article. Often news articles contain opinion. Can you find any words in this article which show the writer's opinion? *(lucky, neatly and expertly, substantial)*
8) Who has been interviewed? (Interviews are usually with someone involved or affected / eyewitness / expert on relevant topic / spokesperson for relevant group)
9) Are the interviews in direct or reported speech? How can you tell? (Look for use of 1st or 3rd person, present or past tense, speech marks or no speech marks, but above all whether it is the actual words spoken.) Do you prefer the direct or reported speech? Why?
10) Can you find anywhere the writer has used a semi-colon? Can you find another place where the writer might have used a semi-colon to join two closely connected sentences? *(After 'does not agree'.)*
11) Is the style chatty or formal? Find some examples of reported or direct speech, the use of informal 'chatty' language or the use of formal, quite 'dry' language to help you decide what style the article is written in.
12) Did you find the article a) informative? and b) entertaining?

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read and sort the Certainty Cards

- Read all of the *Certainty Cards.*
- If you can, cut them out and sort them into those you are certain are true, those you are certain are false and those that you are not sure about. (If you can't cut them out, then label them).

2. Revise Adverbs of Certainty

- Use the *Adverbs of Certainty Revision* card to remind you about this type of adverb.
- Complete the activities on *Adverbs of Certainty Sentences*.

3. Now for some writing

- Read the *Adverbs of Certainty List*. Use some of these words to make up sentences about the *Certainty Cards*.
- Aim to write 6-10 sentences.

When you have finished your sentence writing, share it with a grown-up and explain to them about adverbs of certainty. You definitely can do it!

Try this Fun-Time Extra

- Use the Internet to research five of the statements on the Certainty Cards. Can you find evidence that they are true or untrue? When you have found out, try testing one of the grown-ups in your family.

Certainty Cards

A coin dropped from a tall building can kill.

We only use 10% of our brains.

We lose most body heat through our heads.

If you swallow an apple pip, a tree will grow in your stomach.

The tongue has zones to detect different tastes.

Head lice only like clean hair.

You can catch a cold from being cold.

Deserts are always hot.

Falling coconuts kill more people than sharks.

Goldfish have 3 second memories.

A cockroach can live for three days without its head.

Astronauts would explode without space suits.

Elephants have good memories.

Lightning can't strike the same place twice.

You are taller in the morning than in the evening.

Your irises are as unique as your fingerprints.

A tomato is a fruit.

It is possible to shatter glass with the voice.

The Big Bang was loud.

Olympic medals are solid gold.

Adverbs of Certainty – Revision Card

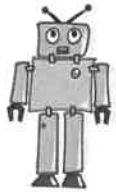
Adverbs

Verbs tell you what something is doing, being or feeling.
An **adverb** tells you more about a **verb**.
Some **adverbs** tell us how **certain** we are about the **verb**.

Bees **definitely die** when they sting you.

Spinach **possibly makes** you stronger.

Robots will **perhaps take** over the world one day.



Adverbs of certainty

You can order these **adverbs** by certainty.

never | perhaps, maybe, possibly | probably | surely, definitely, certainly

Do you agree with this order?

Word order

Adverbs of certainty usually go <u>before</u> the main verb.

Mice **definitely like** cheese.

Ostriches **certainly put** their heads in the ground.

Sometimes **adverbs of certainty** can go <u>at the beginning</u> of the sentence .

Maybe your face will **stay** that way if the wind changes.

Perhaps you will **find** gold at the end of the rainbow.

Word order

Adverbs of certainty usually go <u>after</u> **'to-be' verbs.**

The sun **is certainly** yellow.

I **am definitely** surprised.

Adverbs of certainty usually go between **main verbs** and <u>auxillary</u> **verbs.**

I **have definitely heard** that before.

She **had probably read** it in a book.

Adverbs of Certainty Sentences

Read these sentences. Find and mark the verbs, then find and mark the adverbs of certainty.

Try changing the adverbs of certainty. Can you find one that will work just as well? Can you find any that change the meaning? Can you find any that sound awkward or unnatural?

Try changing the word order. Listen to the difference. How does it sound?

1. Probably most people think that there are just seven colours in the rainbow.

2. A falling coin would certainly sting your skin.

3. I was surely unlucky to keep on dropping my toast.

4. If you want to save power, you should definitely turn-off your computer.

5. Perhaps he thought that the Internet and the World Wide Web were the same thing.

6. Maybe people call the earth a sphere because it is simpler than saying oblate spheroid!

Adverbs of Certainty

certainly

conceivably

definitely

likely

maybe

obviously

perhaps

potentially

plausibly

possibly

probably

really

surely

truly

undoubtedly

unlikely

Your own sentences

Write sentences about the Certainty Cards using the adverbs of certainty. e.g. It is possibly true that Olympic medals are made of pure gold. Highlight the adverbs of certainty that you have used.

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read two of the Newspaper Reports about fish with accents

- Choose two of the *Newspaper Reports* about fish with accents and read them carefully. You can choose to read 1 and 3 or you could read 2 and 4.

2. Annotate one of the Newspaper Reports

- Read *Features to watch out for in a Newspaper Report* and then choose one of the *Newspaper Reports*. Write notes on it, using underlining and highlighting to show the features that it contains.

3. Answer questions about the Newspaper Reports

- Think about the *Reading Questions* for your two *Newspaper Reports.*
- Make notes about your answers on *Reading Notes*.

3. Now for some writing

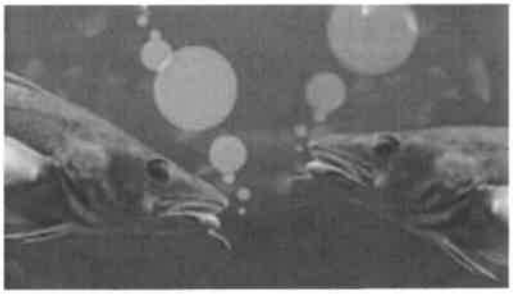
- Read *Headline Stories*. Choose at least 3 and up to 6 of the stories and make up pairs of headlines for them. Make one of your headlines serious and formal and one jokey and informal.

Try these Fun-Time Extras

- Use the Internet to find out more about the *Headline Stories*.
- Visit www.ripleys.com and read some surprising stories there. Tell a grown-up about the most amazing story that you find.

Cod have regional accents, recordings reveal

The cod is best known for being deep-fried in batter and placed on a pile of chips to make up the UK's most famous dish. But British scientists are about to probe a lesser-known feature of the white-fleshed fish: its regional accents.



"They're very different," says Professor Steve Simpson, a marine biologist from the University of Exeter who specialises in the field of bioacoustics.

Underwater recordings of the peculiar grunts made by American and European cod reveal obvious distinctions, he says. The Americans make "quite a staccato, banging, bop, bop, bop sound" while the others do more of a "deep, rumbling growling".

Prof Simpson thinks cod around Britain could have developed localised accents, too, because they gather in the same spawning grounds generation after generation. But no one knows for sure, as the research has yet to be done.

Part of Prof Simpson's work will cover the impact on marine life of noise pollution from ships and marine construction in Britain's busy waterways. But he also wants to look at whether fish around the UK have accents.

But Prof Simpson says the cod has a much richer array of rumblings, made by the male fishes' swim bladders to attract mates.

The variations in the sounds they make could make the fish more vulnerable to threats such as climate change. As sea temperatures rise, cold-water species such as cod are migrating further north to cooler spots, away from their traditional breeding grounds. This means that fish could be forced to mix for the first time with others that "may not share the same vocal repertoire", said Prof Simpson, raising the prospect that they will struggle to integrate and breed.

He hopes to be among the first scientists to work on the £200m National Environment Research Council vessel being built on Merseyside now dubbed the "Sir David Attenborough" after the famous naturalist and broadcaster.

He thinks the ship will also help researchers learn if creatures in British waters are being affected by human noise pollution. Seawater is much denser than air, so sounds travel much faster and further, and Prof Simpson has already found fish on coral reefs that are susceptible to noise pollution.

By learning more about how fish communicate, scientists may be able to devise ways to minimise the effects of human noise, perhaps by revealing the best times to build offshore wind farms or other marine installations outside spawning seasons.

YOU'VE COD TO BE KIDDING!

Fish expert to spend £300,000 of taxpayer money researching whether cod have different accents

A FISH expert has received £300,000 of taxpayers' money — to study whether cod "speak" with regional dialects!

Simpson believes cod off Cornwall sound different to those at Liverpool.

Did you say sum fin? … A fish expert thinks cod may not understand each other's dialects

The expert will test his theory by putting microphones on the seabed and sending his team around on kayaks with mobile recorders.

Prof Simpson — funded by the Government-financed Natural Environment Research Council — says cod communicate with "elaborate thumping or growling noises" to attract a mate.

But with southern seas growing increasingly warm, the fish are moving north.

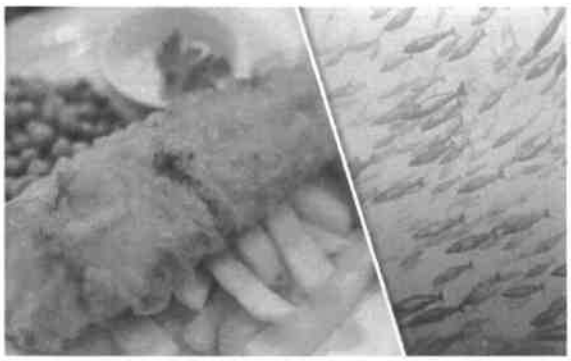
Cod attract their mates with thumping or growling noises.

It is feared southern cod will not understand northern cod — reducing the chances of breeding success.

Retrieved 09/10/16 & adapted from: https://www.thesun.co.uk/news/1913152/fish-expert-to-spend-3000-of-taxpayer-money-researching-whether-cod-have-different-accents/

British tragedy as cod ACCENTS could put fish and chip suppers under threat

FISH and chip suppers could be under threat because cod are struggling to understand each other, scientists have claimed.



A traditional British favourite, the fish and chip supper could be under threat because cod are struggling to understand each other

They said that cod have regional accents, with American fish sounding very different to their British cousins.

As fish stocks move north due to climate change warming up the seas, the rival tribes may not be able to speak to each other.

The Exeter University study will be presented today in Liverpool at *Into the Blue*, the science showcase run by the National Environment Research Council.

Prof Steve Simpson, Associate Professor in Marine Biology and Global Change, said cod may also find their "voices" being drowned out by noise pollution such as ships' engines.

He said: "Cod produce a variety of sounds using their swim bladders, to establish territories, raise the alarm and attract mates.

As cod move north due to climate change the rival tribes may not be able to speak to each other.

"We may find that the 'gossip' essential to their society is being drowned out. If we value our fish stocks – or our Friday night fish supper – we need to understand this.

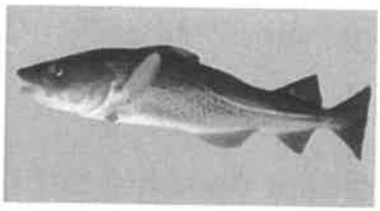
"Recordings of American cod are very different to those from their European cousins, so there is a precedent.

"This species is highly vocal with traditional breeding grounds established over hundreds or even thousands of years, so the potential for regionalism is there."

He warned that as sea temperatures rise, cold-loving fish species such as cod are migrating north. Different regional populations coming into contact for the first time may not share the same vocal repertoire and could struggle to integrate, share territory and breed.

Retrieved 09/10/16 & adapted from: http://www.express.co.uk/news/uk/717557/cod-accents-british-fish-and-chip-suppers-under-threat

Searching for Scouse cod and Geordie haddock



- Scientists investigate whether fish species have regional dialects.
- Marine sound pollution may interfere with fish communication and breeding.
- Research presented at *Into the blue* science showcase.

Scientists this week launched a new study into the 'soundscape' of Britain's seas, aiming to better understand the impact of maritime noise pollution on fish including their ability to communicate.

Species such as cod and haddock are known to use vocalisations to attract mates so researchers will be looking at the possible impacts of noise on their behaviour.

Professor Steve Simpson, associate professor in marine biology & global change at the University of Exeter, who is leading the research, said, "Seawater is hundreds of times denser than air, so sounds travel much faster and further. We have found that fish on coral reefs are susceptible to noise pollution but we are yet to study the effects in our own waters, which are some of the busiest in the world.

"Cod produce a variety of sounds using their swim bladders, to establish territories, raise the alarm and attract mates. We may find that the 'gossip' essential to their society is being drowned out. If we value our fish stocks - or our Friday night fish supper - we need to understand this."

As part of the study, scientists are also investigating whether fish have regional accents. It is known that many animals, from songbirds to killer whales, have localised dialects, and this has also been documented in clownfish. Professor Simpson believes it may be true for species such as cod and haddock as well.

Climate change may also be a factor. As sea temperatures rise, cold-loving fish species such as cod are migrating north. Different regional populations coming into contact for the first time may not share the same vocal repertoire and could struggle to integrate, share territory and breed.

"There is a vast ecosystem on our doorstep which we barely understand - but all rely on. It's time to get out there and listen, which is why we are so excited to be researching this area and the UK continuing to be a world leader in maritime science."

Environmental science touches us all: we depend on it for clean water, food on our plates and fresh air - it's the science we live and breathe. *Into the blue* is a celebration of this science and a unique opportunity for the public to see, first hand, the work of UK environmental scientists in our skies and seas.

Retrieved 09/10/16 & adapted from: http://www.nerc.ac.uk/press/releases/2016/42-babble-fish/

Features to watch out for in a newspaper report

- Attention-grabbing headline.
- Factual – giving information, answering the questions: Who? What? Where? When? How?
- Keeping the story exciting and the pace fast so the reader does not get bored.
- Clear sentences, not too long and complicated.
- Direct quotes from witnesses or reported speech where a direct quote has not been obtained.
- Short paragraphs to break up the text.
- Clear conclusions.
- Style – can be chatty or formal.

Chatty	Formal
• Direct speech. • Active voice to say exactly who did what. • Shorter sentences. • Informal language (e.g. contractions such as 'don't' or 'wouldn't').	• Reported speech. • Passive voice to avoid saying who or what was the cause. • Longer sentences. • Formal language with no shortened forms.

Reading Questions

Purpose & Audience

What is the **purpose** of the texts?
Do they have the same purpose?

What is the main point of each article?
Are they the same?

Who is each article aimed at? Who is the intended **audience**?

Which article would you choose to read? Explain why.

Style

Which article is most/least formal? How can you tell?

What **tone** is used for the articles? *Serious, jokey, informative, angry?*
What impact does the tone have on the reader?

Do the articles use the same **sentence structures**? *Long/short sentences? Single or multiclause sentences?* Why do you think this is?

Is the type of **vocabulary** the same in each article?
Why might this be?

Clarity (How clear is each article?)

How does the **structure** support the reader?
Does the first paragraph introduce the article? Do the paragraphs lead logically on from each other?

Is the article **clear**? Do you understand what the main points are?

Is the article **consistent** or does it change in tone or style? How does this make a reader feel about an article?

Reliability

How much do you **trust** the articles to be accurate? *Why?*

Did you spot any **bias** or were the articles **balanced**?

Did you spot any mistakes or were some facts different?

Did the articles give you the whole story or just parts of it?

Bias – having a strong opinion which only sees things one way

Reading Notes

Purpose and Audience	Style
Clarity	**Reliability**

Headline Stories

Crazy teenager, Stian Ytterdahl from Norway, will never forget one **particular** visit to his local McDonalds restaurant – because he has had the receipt tattooed onto his right arm. The inked **artwork** features his order, which included a Coke, three cheeseburgers and a Happy Meal.

p.214 **Ripley's Believe It or Not!**

Madcap Li Peng from China, **entertains** crowds by putting live **poisonous** snakes, scorpions and spiders in his mouth before pulling them back out again. He trained for the trick by being locked in a room with 30 **deadly** snakes. Although he has been bitten many times, he says he has learned to neutralise the snakes' venom.

p. 170 **Ripley's Believe It or Not!**

Graduate engineer, Tom Holmes from England, spent seven and a half hours building a free-standing domino tower from 2,688 dominoes. The **amazing** tower stood 5.3 metres tall – taller than a double decker bus.

p. 174 **Ripley's Believe It or Not!**

Extreme athlete Franz Mueller – the Austrian Rock – used **sheer muscle power** to pull a 156.5 ton Boeing 777 airplane by rope over 14.5 m at Vienna Airport. He **trained** for five months for the **feat** and afterward described the effort of pulling the 64m plane as 'brutal'.

p.175 **Ripley's Believe It or Not!**

At the International High Line Meeting, 22 **daredevils dozed** in 16 hammocks **suspended** hundreds of feet in the air on Mount Piana in Northern Italy. The **thrill-seekers** attached their hammocks to a high line. Once **nestled** in their high-altitude sleeping quarters, some were so **relaxed** that they even began playing the guitar.

p. 179 **Ripley's Believe It or Not!**

Fire crews had to rescue **unlucky 16-year-old** Ella Birchenough when she became **stuck** in a storm drain while trying to retrieve her mobile phone. She **jumped** into the drain in Dover, England, after **accidently** dropping her phone down it, but then became wedged up to her waist.

p.231 **Ripley's Believe It or Not!**

Headlines

Make up pairs of headlines.
Make one headline jokey and informal and one headline serious and formal.