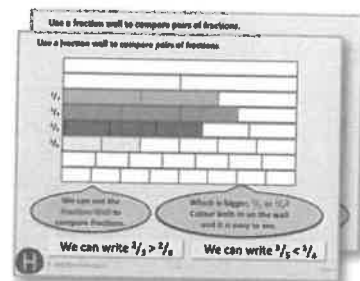


Week 7, Day 1

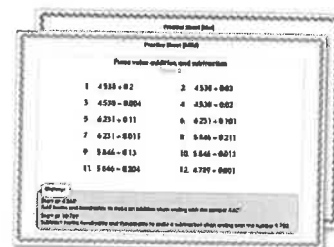
Multiply and divide decimals by 10, 100 and 1000.

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.



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



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



4. Think you've cracked it? Whizzed through the Practice Sheets?
Have a go at the Investigation...

Learning Reminders

Multiply and divide by 10, 100 and 1000.

We can use a place value grid to multiply 4.52×10 , then 4.52×100 , then 4.52×1000 .

1000s	100s	10s	1s	0.1s $\frac{1}{10}$ s	0.01s $\frac{1}{100}$ s
			4	5	2
		4	5	2	
	4	5	2		
4	5	2	0		

When we multiply by 10, 100 and 1000, the digits all move together, 1, 2, or 3 place value columns to the left.

Learning Reminders

Multiply and divide by 10, 100 and 1000.

We can use a place value grid to divide $2340 \div 10$, then $2340 \div 100$, then $2340 \div 1000$.

1000s	100s	10s	1s	0.1s $\frac{1}{10}$ s	0.01s $\frac{1}{100}$ s
2	3	4	0		
	2	3	4		
		2	3	4	
			2	3	4

When we divide by 10, 100 and 1000, the digits move together, 1, 2, or 3 place value columns to the right.

The final zero is not needed after the decimal point.

But be careful with numbers like 507 where the zero is not at the end:

$$507 \div 100 = 5.07 \text{ NOT } 5.7$$

Practice Sheet Mild

Multiply and divide by 10, 100 and 1000

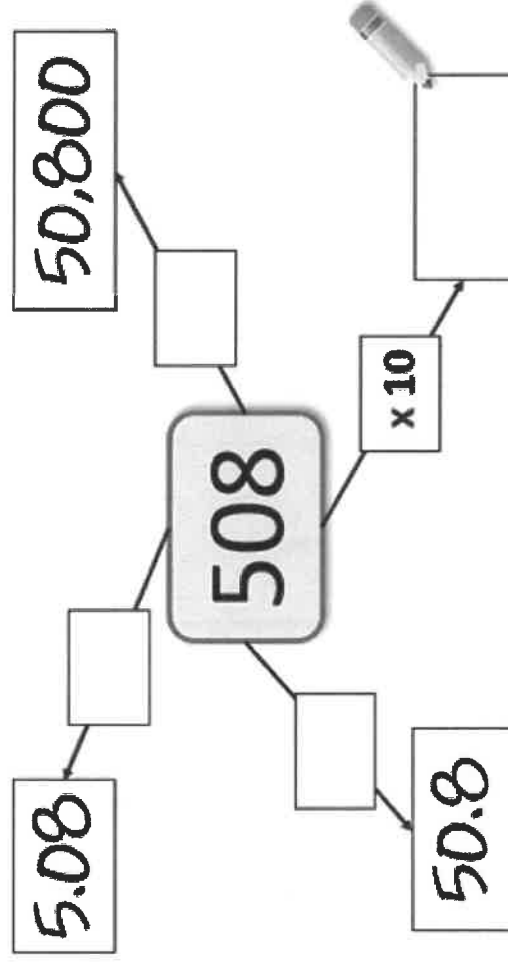
A 245×10 245×100 $245 \div 10$ $245 \div 100$

B 54.3×10 54.3×100 $54.3 \div 10$ $54.3 \div 100$

C 3.47×10 3.47×100 3.47×1000

D $7640 \div 10$ $7640 \div 100$ $7640 \div 1000$

Challenge



Place value grid

1000s	100s	10s	1s	0.1s	$\frac{1}{10}$ s	0.01s	$\frac{1}{100}$ s

Practice Sheet Hot

Multiply and divide by 10, 100 and 1000

A

$$3.47 \times 10 \quad 3.47 \times 100 \quad 3.47 \times 1000$$

B

$$7640 \div 10 \quad 7640 \div 100 \quad 7640 \div 1000$$

C

$$845 \times \underline{\hspace{2cm}} = 845,000 \quad 845 \div \underline{\hspace{2cm}} = 8.45$$

D

$$\underline{\hspace{2cm}} \times 10 = 36.2 \quad \underline{\hspace{2cm}} \div 100 = 36.2$$

E

$$24.5 \times 10 \div 100 \times 1000 \div \underline{\hspace{2cm}} = 24.5$$

Challenge

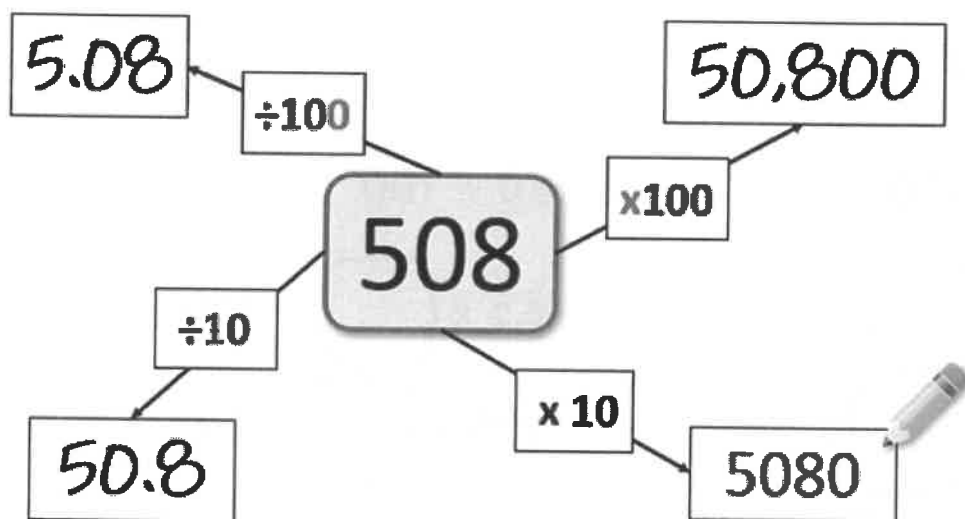
Write your own chain of at least four steps which starts and ends on the same number, like Section G.

Practice Sheets Answers

Multiply and divide by 10, 100 and 1000 (mild)

A	$245 \times 10 = 2450$	$245 \times 100 = 24500$	$245 \div 10 = 24.5$
	$245 \div 100 = 2.45$		
B	$54.3 \times 10 = 543$	$54.3 \times 100 = 5430$	$54.3 \div 10 = 5.43$
	$54.3 \div 100 = 0.543$		
C	$3.47 \times 10 = 34.7$	$3.47 \times 100 = 347$	$3.47 \times 1000 = 3470$
D	$7640 \div 10 = 764$	$7640 \div 100 = 76.4$	$7640 \div 1000 = 7.64$

Challenge



Multiply and divide by 10, 100 and 1000 (hot)

A	$3.47 \times 10 = 34.7$	$3.47 \times 100 = 347$	$3.47 \times 1000 = 3470$
B	$7640 \div 10 = 764$	$7640 \div 100 = 76.4$	$7640 \div 1000 = 7.64$
C	$845 \times 1000 = 845,000$	$845 \div 100 = 8.45$	
D	$3.62 \times 10 = 36.2$	$362 \div 100 = 3.62$	
E	$24.5 \times 10 \div 100 \times 1000 \div 100 = 24.5$		

A Bit Stuck?

Multiplying and dividing by 10 and 100

34×10

34×100

3.4×10

3.4×100

$650 \div 10$

$650 \div 100$

$72 \div 10$

$7 \div 10$

$800 \div 100$

$80 \div 100$

$4.5 \times \square = 45$

$4.5 \times \square = 450$

$270 \div \square = 2.7$

$270 \div \square = 27$

Challenge

$3.6 \times \square \times \square = 360$

$940 \div \square \div \square = 9.4$

$72 \times \square \div \square = 7.2$

Place value grid

1000s	100s	10s	1s	0.1s	$\frac{1}{10}$ s	0.01s	$\frac{1}{100}$ s

A Bit Stuck?

Answers

Multiplying and dividing by 10 and 100

$$34 \times 10 = 340$$

$$3.4 \times 10 = 34$$

$$650 \div 10 = 65$$

$$72 \div 10 = 7.2$$

$$800 \div 100 = 8$$

$$4.5 \times 10 = 45$$

$$270 \div 100 = 2.7$$

$$34 \times 100 = 3400$$

$$3.4 \times 100 = 340$$

$$650 \div 100 = 6.5$$

$$7 \div 10 = 0.7$$

$$80 \div 100 = 0.8$$

$$4.5 \times 100 = 450$$

$$270 \div 10 = 27$$

Challenge

$$3.6 \times 10 \times 10 = 360$$

$$940 \div 10 \div 10 = 9.4$$

$$72 \times 10 \div 100 = 7.2$$

Investigation Find my route

Investigate routes through a grid, multiplying and dividing by 10, 100 or 1000

- Starting with 435 trace a route through the grid, moving horizontally or vertically between boxes.
- What outcome do you get? Record it.
- Try another route.
- What outcome do you get? Record it.
- Try at least 4 different routes through the grid
- How many different outcomes can you find?

Example

Start at 435
move right,
move down,
move down,
move down,
move right...END
 $435 \div 100 \times 10 \times 100$
 $\div 10 \times 10 = 4350$

Investigate

- What are the smallest and largest possible outputs?
- Does the longest path have the largest output?
- Now choose a different 3-digit starting number.

Challenge

Draw a route on the grid. If we follow this, what **single calculation** can replace all those we do en-route?

Answer the calculations to check.

Repeat with another route.

What if diagonal moves were allowed?

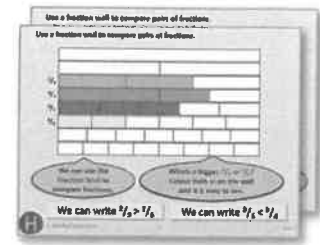
Investigation Resource Sheet

435	$\div 100$	$\times 10$	$\times 10$
$\div 10$	$\times 10$	$\times 100$	$\div 100$
$\div 10$	$\times 100$	$\div 100$	$\times 10$
$\times 10$	$\div 10$	$\times 10$	END

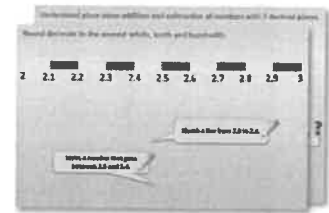
Week 7, Day 2

Use Frog (counting up) to subtract pairs of decimal numbers.
Each day covers one maths topic. It should take you about 1 hour or just a little more.

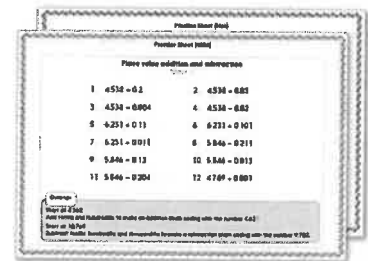
1. If possible, watch the PowerPoint presentation with a teacher or another grown-up.



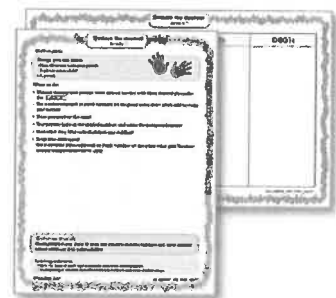
OR start by carefully reading through the Learning Reminders.



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



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



4. Think you've cracked it? Whizzed through the Practice Sheets?
Have a go at the Investigation...

Learning Reminders

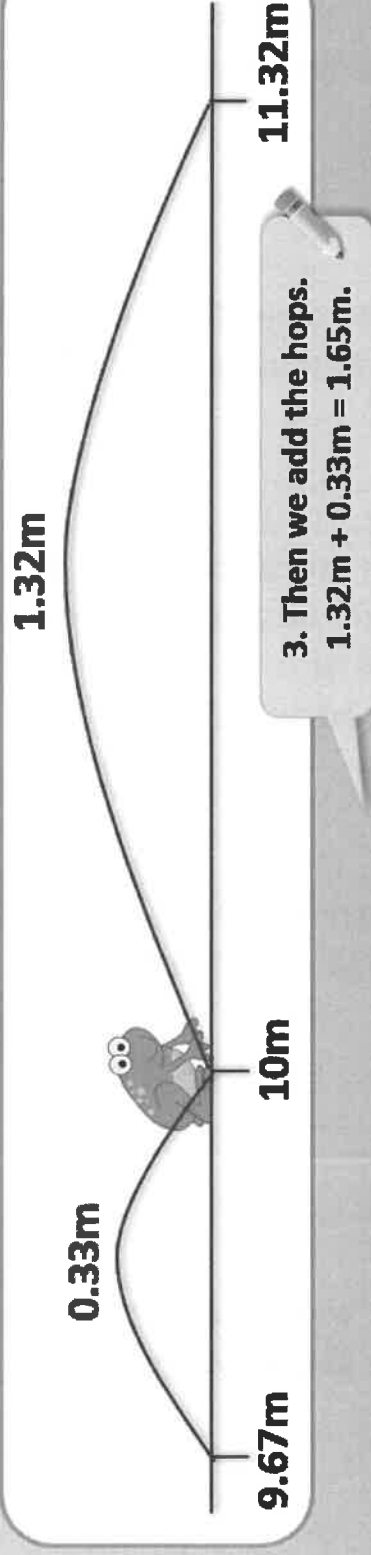
Use Frog (counting up) to subtract pairs of numbers.

Harry's best javelin throw at sports day last summer was 9.67 metres, but today he has thrown a huge 11.32 metres! How much further has he thrown?

We can use FROG to count up to find the difference in the throws.

1. Frog jumps 0.33m from 9.67m to the next whole number of metres.

2. Frog next jumps 1.32m from 10m to 11.32m.



Learning Reminders

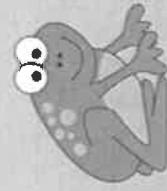
Use Frog (counting up) to subtract pairs of numbers.

Distance	Measurement
Classroom width	4.56m
Classroom length	5.3m
Hall length	10.4m
Hall width	7.56m
Table width	0.5m
Table length	1.25m

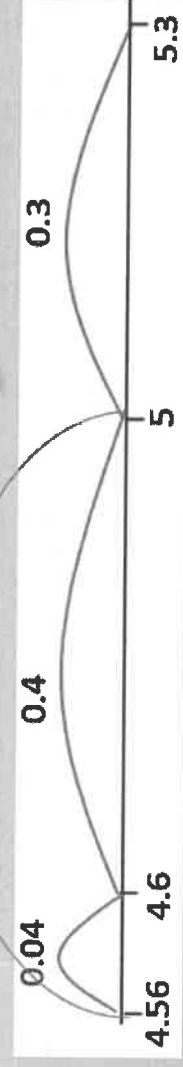
How much *longer* is the classroom than it is *wide*?

We draw an empty number line jotting to show how we could find this difference.

We need to be careful about place value when adding tenths to tenths and hundredths to hundredths.



0.44



0.04 to 4.6, then 0.4 to 5, or one big jump of 0.44.

Then 0.3 to 5.3.

$$0.4\text{m} + 0.3\text{m} + 0.04\text{m} = 0.74\text{m, or } 74\text{cm}$$

Practice Sheet Mild

Subtracting decimals

Use Frog to solve these subtractions.

1. $3.5 - 2.9$

2. $5.2 - 3.7$

3. $9.1 - 5.8$

4. $7.2 - 6.85$

5. $8.3 - 4.75$

6. $9.23 - 7.8$

Challenge

Make up at least 5 subtractions with an answer of 1.4

Practice Sheet Hot Subtracting decimals

Use Frog to solve these subtractions.

- | | | | |
|-----------------|-----------------|------------------|------------------|
| 1. $7.3 - 6.79$ | 2. $8.45 - 7.8$ | 3. $5.24 - 3.7$ | 4. $9.4 - 5.78$ |
| 5. $8.7 - 6.45$ | 6. $7.5 - 5.29$ | 7. $10.67 - 5.3$ | 8. $12.8 - 9.27$ |

Challenge

Make up at least 5 subtractions with an answer of 3.15

Practice Sheets Answers

Subtracting decimals (mild)

1. $3.5 - 2.9 = 0.6$

2. $5.2 - 3.7 = 1.5$

3. $9.1 - 5.8 = 3.3$

4. $7.2 - 6.85 = 0.35$

5. $8.3 - 4.75 = 3.55$

6. $9.23 - 7.8 = 1.43$

Challenge

Accept any calculations with the correct answer of 1.4, e.g. $6.8 - 5.4 = 1.4$, $3.1 - 1.7 = 1.4$ etc.

Subtracting decimals (hot)

1. $7.3 - 6.79 = 0.51$

2. $8.45 - 7.8 = 0.65$

3. $5.24 - 3.7 = 1.54$

4. $9.4 - 5.78 = 3.62$

5. $8.7 - 6.45 = 2.25$

6. $7.5 - 5.29 = 2.21$

7. $10.67 - 5.3 = 5.37$

8. $12.8 - 9.27 = 3.53$

Challenge

Accept any calculations with the correct answer of 3.15, e.g. $8.75 - 5.6 = 3.15$

A Bit Stuck? Frogs teeny hops

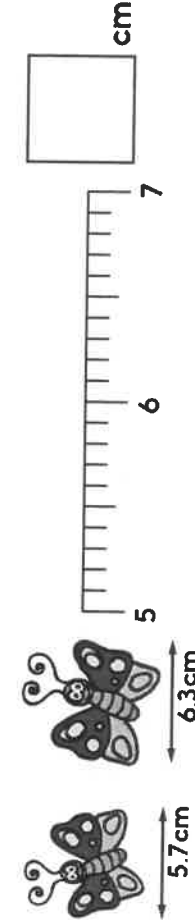
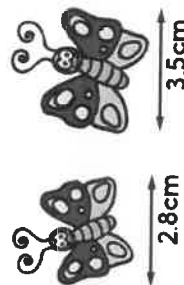
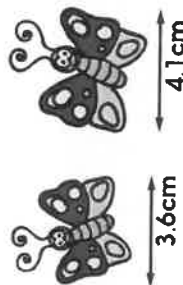
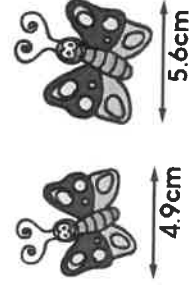
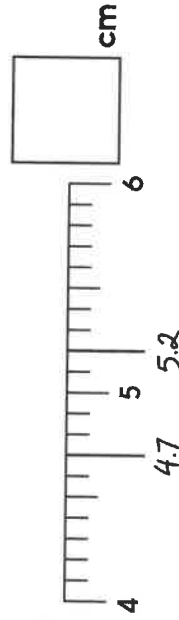
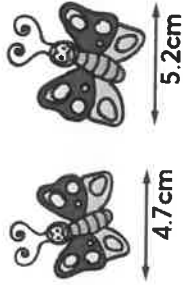
Work in pairs

What to do:

- Use Frog on the decimal number lines to find the difference between each pair of wingspans.

Things you will need:

- A pencil



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

Draw your own number line jotting to work out $6.2 - 5.5$ and $8.4 - 7.8$.

Remember to use your pairs to 10 to help.

Learning outcomes:

- I can use counting up (Frog) on a decimal number line to find the difference between decimal numbers on either side of a whole number, e.g. $2.3 - 1.8$.
- I am beginning to sketch my own number line jottings to subtract decimal numbers on either side of a whole number.

A Bit Stuck?
Frogs teeny hops



A Bit Stuck?
Frogs teeny hops



A Bit Stuck?
Frogs teeny hops

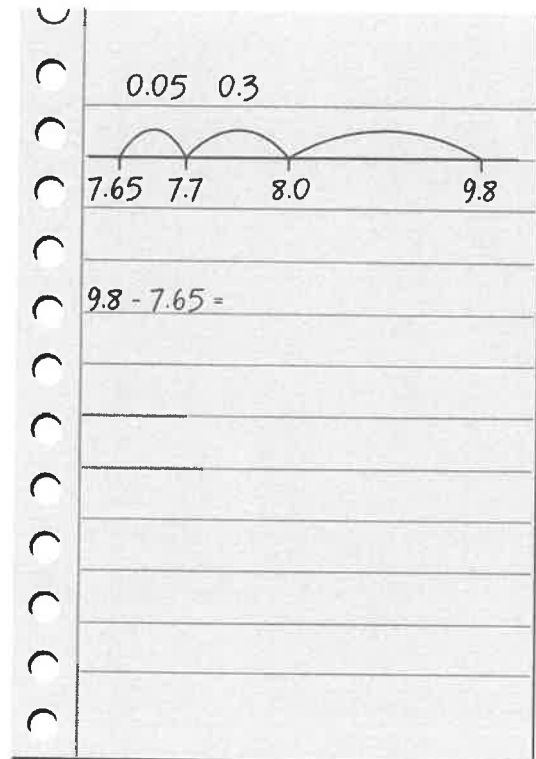
Investigation Decimal differences

1. Use counting up to work out $9.8 - 7.65$. Keep a note of both the subtraction and the answer.
2. Now work out $8.7 - 6.54$. Keep a note of the subtraction and your answer.
3. Carry on this pattern of subtractions, $7.6 - 5.43$, $6.5 - 4.32$, $5.4 - 3.21$, making a record of all your subtractions and their answers.

Can you predict the answer to the next subtraction?

Why do you think the sequence of subtractions gives such a pattern?

4. Now try $12.3 - 4.56$
 $23.4 - 5.67$
 $34.5 - 6.78$ and so on.



What happens this time? This is a harder pattern to explain!

Look at how the whole number parts of the pair of numbers in each subtraction are increasing, and then how the decimal parts are increasing.

Investigate your own sequences of subtractions with consecutive digits, e.g. $9.87 - 6.5$

$$8.76 - 5.4$$

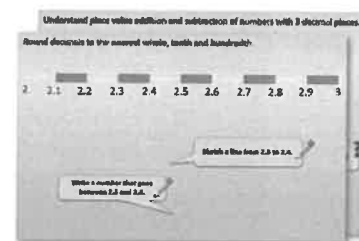
$$7.65 - 4.5$$

For this sequence, you can use place value to subtract rather than counting up. See what other patterns you can find. Why do you think they occur?

Week 7, Day 3

Use counting up (Frog) to solve subtraction word problems.
Each day covers one maths topic. It should take you about 1 hour or just a little more.

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



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

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

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

Learning Reminders

Use counting up (Frog) to solve subtraction word problems.

This table shows the prices in two bike shops.

Item	Shop A	Shop B
Cycle computer	£14.97	£18.50
Cycle helmet	£25.99	£21.49
Waterproof coat	£45.99	£38.75
Cycling gloves	£14.79	£11.25
Cycling jersey	£37.89	£32.49
Cycling shorts	£24.75	£25.49



We can use Frog to find the exact difference between the two prices of each item.

**Cycle
computer**



Frog jumps 3p to £15, then £3 to £18, then 50p to £18.50.

$$3\text{p} + £3 + 50\text{p} = £3.53.$$

Learning Reminders

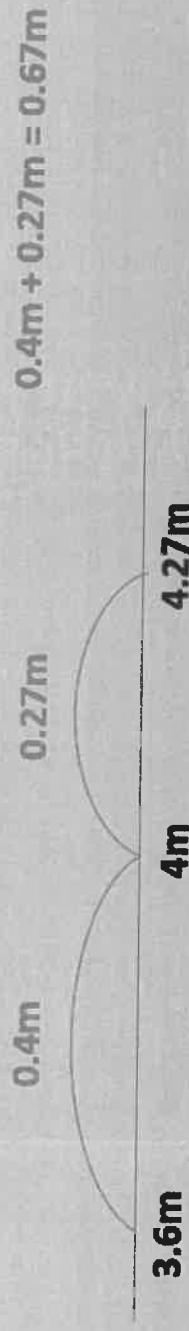
Use counting up (Frog) to solve subtraction word problems.

A room measures 3.6m by 4.27m. How much more is the length than the width?

Read the problem carefully. Think what you would need to do with the numbers to solve it. Write the calculation needed. Solve it!

$$4.27\text{m} - 3.6\text{m}$$

We can count up with Frog!



Learning Reminders

Use counting up (Frog) to solve subtraction word problems.

Grandma is making some curtains. The material she has is 5 metres long. She makes two curtains, each 2.37m long. How much material does she have left?

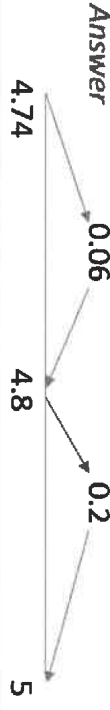
Drawing a bar model can help us understand a problem, especially when there are 2 steps needed!

5 metres		
2.37m		2.37m
		??

First find double 2.37m then count up using Frog to find how much material is left.

1. Double 2.37m is 4.74m.

2. $5\text{m} - 4.74\text{m} = 0.26\text{m}$.



Practice Sheet Mild

Word problems

Use Frog to help solve these word problems

1. Carla has £50 for her birthday. She spends £37.89 on books and music downloads. How much does she have left?
2. Last year Sam was 1.56m tall. This year he is 1.63m tall. How much has he grown?
3. A room measures 3.6m by 4.27m. How much more is the length than the width?
4. Grandma is making some curtains. The material she has is 5 metres long. She makes two curtains, each 2.37m long. How much material does she have left?
5. Auntie Sarah is making two picture frames. She needs 1.68m of wood for the first, and 2.14m for the second. She has 4.2m of wood. How much will be left if she doesn't make any mistakes?
6. Granddad buys a £4.99 book for each of his 6 grandchildren. How much change does he get from £50?
7. A peak rail ticket is £45.80, whereas an off-peak rail ticket for the same journey is £27.59. How much cheaper is the off-peak ticket?
8. A group of four friends are sharing the cost of takeaway pizzas. The pizzas cost £24.84. How much change would each friend get from £10?

Practice Sheet Hot Word problems

Use Frog to help solve these word problems

1. Carla has £50 for her birthday. She spends £25.27 on books and £12.64 on music downloads. How much money does she have left?
2. Last year Sam was 1.56m tall. This year he is 1.63m tall. Elena was 1.48m and is now 1.53m. Who has grown most?
3. A room measures 3.6m by 4.27m. Dieter thinks the perimeter is about 14 metres. How accurate is his estimate?
4. Grandma is making some curtains. The material she has is 10 metres long. She makes two curtains, each 2.37m long and two curtains each 1.65m long. How much material does she have left?
5. Auntie Sarah is making three picture frames. She needs 1.68m of wood for the first, 2.3m for the second and 0.9m for the third. She has 5.2m of wood. How much will be left if she doesn't make any mistakes?
6. Grandad buys a £4.99 book and a £1.25 card for each of his 6 grandchildren. How much change does he get from £50?
7. A peak rail ticket is £45.80, whereas an off-peak rail single ticket is £12.89 and peak ticket for the return journey is £21.45. How much cheaper is it to buy the two single tickets than the peak return ticket?
8. A group of six friends are sharing the cost of takeaway pizzas. The pizzas cost £48.72. How much change would each friend get from £10?

Practice Sheets Answers

Word problems (mild)

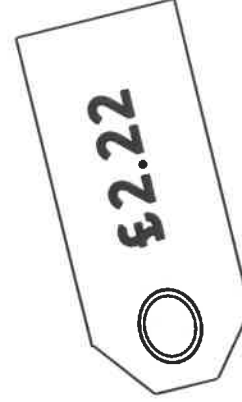
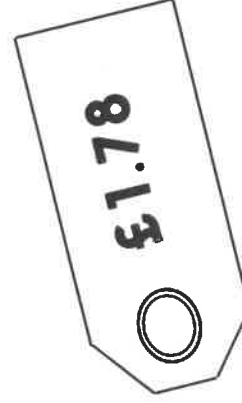
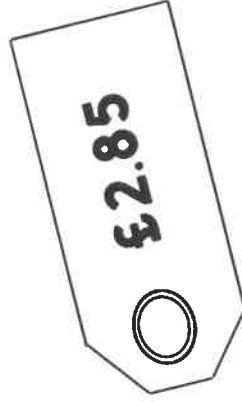
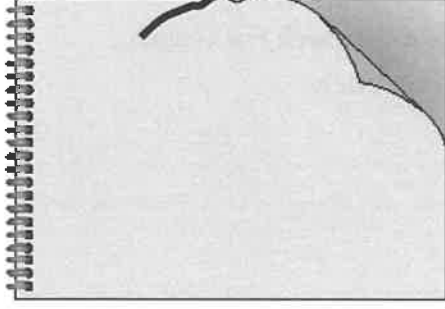
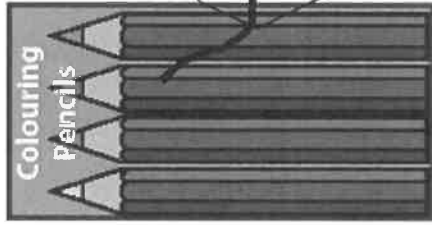
1. Carla has £12.11 left.
2. Sam has grown 0.07m (7cm) in the last year.
3. The length is 0.67m (67cm) longer than the width.
4. Grandma has 0.26m (26cm) of material left.
5. Auntie Sarah will have 0.38m (38cm) of wood left.
6. Grandad gets £20.06 change.
7. The off-peak ticket is £18.21 cheaper than the peak rail ticket.
8. Each of the friends would get £3.79 change each.

Word problems (hot)

1. Carla has £12.09 left.
2. Sam has grown 0.07m (7cm) and Elena has grown 0.05m (5cm).
Sam has grown most in the last year.
3. The perimeter is 15.74m so Dieter is 1.74m out.
4. Grandma has 1.96m (196cm) of material left.
5. Auntie Sarah will have 0.32m (32cm) of wood left.
6. Grandad gets £12.56 change.
7. It is £11.46 cheaper to buy two singles than the peak return ticket.
8. Each of the friends would get £1.88 change each.

A Bit Stuck?

Finding change



Find the change from £5 for each of these six prices.

Challenge

I spend £2.42. Do I have enough money left to buy a notebook?

A Bit Stuck? Finding change



Check your understanding

Questions

Fill the empty boxes:

$$0.86 = 8.6 \square 10$$

$$319 = \square \times 100$$

$$\square \div 100 = 8.2$$

$$7.1 = \square \div 1000$$

True or False?

When you divide a 4-digit number by 100, you end up with a 2-digit number.

Write the missing length in each bar diagram.



Sunil and Zoe were meeting. They cycled 25 Km between them.

Zoe cycled 11.47km. How far did Sunil cycle?

Answers on next page

Check your understanding

Answers

Fill the empty boxes:

$$0.86 = 8.6 \boxed{\div} 10$$

$$319 = \boxed{3.19} \times 100$$

$$\boxed{820} \div 100 = 8.2$$

$$7.1 = \boxed{7100} \div 1000$$

Check on a place value grid.

True or False?

When you divide a 4-digit number by 100, you end up with a 2-digit number.

Usually false. True only if the number ends with two zeros, e.g. $4300 \div 100 = 43$.

Bar model calculations

6.91m, 1.67m, 1.21m Probably best-solved by counting up (Frog) from the smaller to larger number.

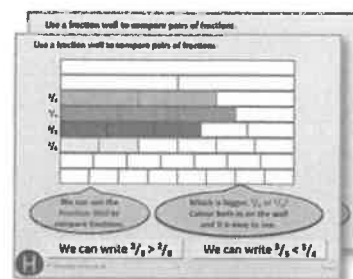
$$25\text{km} - 11.47\text{km} = 13.53\text{km}$$

Week 7, Day 4

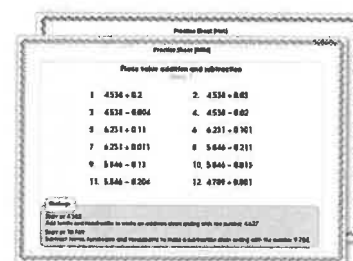
Use grid and short multiplication to multiply 4-digit by 1-digit numbers.

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

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



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



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



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

Learning Reminders

Use grid and short multiplication to multiply 4-digit by 1-digit numbers

$$6 \times 4872$$

It is useful to estimate first.
Rounding to 6×5000 to give an estimate of 30,000.

Let's try using grid.

\times	4000	800	70	2
6	24,000	4800	420	12
				29,232

First partition 4872 into 4000, 800, 70 and 2 and set out in the grid.

Second solve each multiplication using number facts and place value.

Finally add each answer to find the total.

Learning Reminders

Use grid and short multiplication to multiply 4-digit by 1-digit numbers

$$6 \times 4872$$

Estimate 30,000.

Let's try using short multiplication.

First, set out neatly in columns, leaving a space for any digits carried between columns.

Second, starting on the right, multiply each digit of 4872 in turn. Remember to add on any digits carried.

Finally check with the estimate; that was pretty close!

$$\begin{array}{r} 4872 \\ \times 6 \end{array}$$

$$\begin{array}{r} 541 \\ \hline 29232 \end{array}$$

Practice Sheet Mild

Grid multiplication

Estimate which of these multiplications will give answers:

- less than 1000.
- between 1000 and 3000.
- between 3000 and 5000.
- between 5000 and 7000.
- greater than 7000.

1. 3×642
2. 5×527
3. 6×253
4. 3×275
5. 8×524
6. 3×314
7. 7×823
8. 9×851

Now use grid multiplication to work out the answers!

Challenge

Which of these two multiplications do you think will have the biggest answer?
Check to see if you are right.

9. 3×5364
10. 6×2348

Practice Sheet Hot Short multiplication

Estimate first, then use short multiplication to find the exact answers.

1. 4×6234
2. 7×5382
3. 8×4734
4. 5×7856
5. 6×8431
6. 9×5408
7. 3×8796
8. 7×6857

Challenge

Write a different multiplication with an answer between 20,000 and 30,000.
Write a different multiplication with an answer between 50,000 and 60,000.

Practice Sheets Answers

Grid multiplication (mild)

Estimate which of these multiplications will give answers:

- less than 1000. $3 \times 275, 3 \times 314$
- between 1000 and 3000. $3 \times 642, 6 \times 253, 5 \times 527$
- between 3000 and 5000. 8×524
- between 5000 and 7000. 7×823
- greater than 7000. 9×851

1. $3 \times 642 = 1926$
2. $5 \times 527 = 2635$
3. $6 \times 253 = 1518$
4. $3 \times 275 = 825$
5. $8 \times 524 = 4192$
6. $3 \times 314 = 942$
7. $7 \times 823 = 5761$
8. $9 \times 851 = 7659$

Challenge

Q9 will have the biggest answer as estimating $3 \times 5000 = 15,000$ which is greater than $6 \times 2000 = 12,000$.

9. $3 \times 5364 = 16,092$
10. $6 \times 2348 = 14,088$

Short multiplication (hot)

1. $4 \times 6234 = 24,936$
2. $7 \times 5382 = 37,674$
3. $8 \times 4734 = 37,872$
4. $5 \times 7856 = 39,280$
5. $6 \times 8431 = 50,586$
6. $9 \times 5408 = 48,672$
7. $3 \times 8796 = 26,388$
8. $7 \times 6857 = 47,999$

Challenge

Write a different multiplication with an answer between 20,000 and 30,000.

e.g. $6 \times 3983 = 23,898$

Write a different multiplication with an answer between 50,000 and 60,000.

e.g. $9 \times 6326 = 56,934$

A Bit Stuck? Multiplying choices

Work in pairs

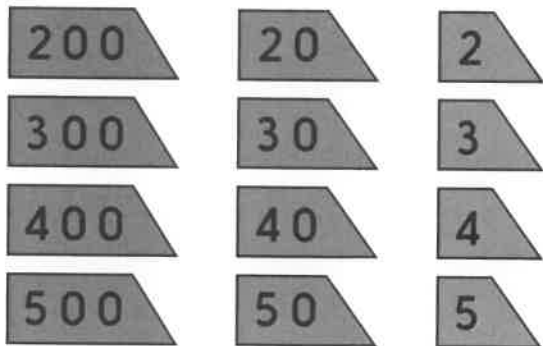
Things you will need:

- A pencil



What to do:

- Choose place value cards from each column to make a 3-digit number. Then use the grid method to multiply your number by any number from 3 to 9.



3×542				
x	500	40	2	
3	1500	120	6	1626

- Your challenge to is come up with multiplications so that:
 - one answer is less than 1000;
 - one answer is between 1000 and 2000;
 - one answer is between 2000 and 3000;
 - one answer is between 3000 and 4000;
 - one answer greater than 4000.
- Spread the work out between you!

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

Try and think of a multiplication with an answer between 5000 and 6000, this time not using any of the place value cards.

Learning outcomes:

- I can use the grid method to multiply 3-digit numbers by 1-digit numbers.
- I am beginning to estimate the answers.

Investigation Last digit specials

1. Use grid or short multiplication to calculate:

1×234

2×345

3×456

4×567

5×678

Write what you notice about the last digit of the answers

2. Use grid or short multiplication to calculate:

1×2345

2×3456

3×4567

4×5678

5×6789

Write what you notice about the last digit of the answers

3. Now consider these... Can you predict the last digits of the answers?

9×8765

8×7654

7×6543

6×5432

5×4321

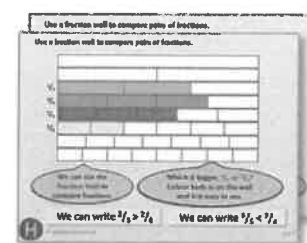
4. Use grid or short multiplication to check your prediction.

Week 7, Day 5

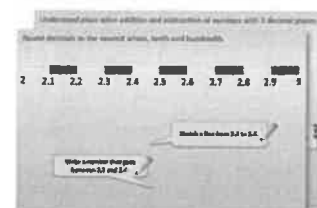
Multiplying a pair of 2-digit numbers using grid multiplication.

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

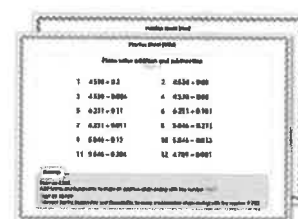
1. If possible, watch the PowerPoint presentation with a teacher or another grown-up.



OR start by carefully reading through the Learning Reminders.



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

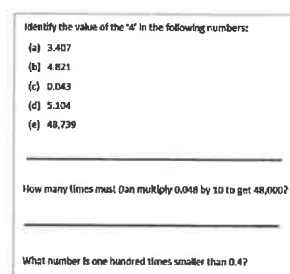


3. Finding it tricky? That's OK... have a go with a grown-up at A Bit Stuck?



4. Think you've cracked it? Whizzed through the Practice Sheets?
Have a go at the Investigation...

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



Learning Reminders

Multiplying a pair of 2-digit numbers using grid multiplication.

$$23 \times 34$$

We can partition both numbers and set them out in a grid.

x	30	4	
20	600	80	680
3	90	12	102
			782

On the first row we are working out 20 lots of 34 by finding 20 lots of 30 (600) and 20 lots of 4 (80) and adding the two together.

On the second row we are working out 3 lots of 34 by finding 3 lots of 30 (90) and 3 lots of 4 (12) and adding the two together.

Then we add the answers to 20 lots of 34 (680) and 3 lots of 34 (102) to find 23 lots of 34 (782).

Learning Reminders

Multiplying a pair of 2-digit numbers using grid multiplication.

$$57 \times 24$$

Let's estimate first. Round 57 to 60 and 24 to 20.

$$60 \times 20 = 1200$$

Partition both numbers and set them out in a grid. Put the larger number on the top row.

x	50	7	
20	1000	140	1140
4	200	28	228
			1368

On this row we have found 20 lots of 57.

On this row we have found 4 lots of 57.

Now we add to find 24 lots of 57.

How does the answer compare with our estimate?

Practice Sheet Mild

Multiplying pairs of 2-digit numbers

1. 24×34

\times	30	4	
20			
4			

20 lots of 34

4 lots of 34

2. 27×35

\times	30	5	
20			
7			

3. 23×42

\times	40	2	
20			
3			

4. 26×38

\times	30	8	
20			
6			

Challenge

Draw your own grids for these multiplications:

5. 25×43

6. 28×32

Practice Sheet Hot

Multiplying pairs of 2-digit numbers

Estimate first, then use grid method to solve these.

1. 32×27
2. 34×48
3. 52×24
4. 75×32
5. 45×45
6. 42×68
7. 36×73
8. 28×65

Challenge

Fill in the missing numbers on this grid, then write a number sentence for the multiplication:

\times	<input type="text"/>	<input type="text"/>	
<input type="text"/>	1550	240	
<input type="text"/>	350	56	

<input type="text"/>	\times	<input type="text"/>	=	<input type="text"/>
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Practice Sheets Answers

Multiplying pairs of 2-digit numbers (mild)

1. 24×34

\times	30	4	
20	600	80	
4	120	16	

$$600 + 120 + 80 + 16 = 816$$

2. 27×35

\times	30	5	
20	600	100	
7	210	35	

$$600 + 210 + 100 + 35 = 945$$

3. 23×42

\times	40	2	
20	800	40	
3	120	6	

$$800 + 120 + 40 + 6 = 966$$

4. 26×38

\times	30	8	
20	600	160	
6	180	48	

$$600 + 180 + 160 + 48 = 988$$

Challenge

5. 25×43

\times	40	3	
20	800	60	
5	200	15	

$$800 + 200 + 60 + 15 = 1075$$

6. 28×32

\times	30	2	
20	600	40	
8	240	16	

$$600 + 240 + 40 + 16 = 896$$

Practice Sheets Answers

Multiplying pairs of 2-digit numbers (hot)

1. 32×27

×	20	7	
30	600	210	
2	40	14	

$$600 + 210 + 40 + 14 = 864$$

2. 34×48

×	40	8	
30	1200	240	
4	160	32	

$$1200 + 240 + 160 + 32 = 1632$$

3. 52×24

×	20	4	
50	1000	200	
2	40	8	

$$1000 + 200 + 40 + 8 = 1248$$

4. 75×32

×	30	2	
70	2100	140	
5	150	10	

$$2100 + 150 + 140 + 10 = 2400$$

5. 45×45

×	40	5	
40	1600	200	
5	200	25	

$$1600 + 200 + 200 + 25 = 2025$$

6. 42×68

×	60	8	
40	2400	320	
2	120	16	

$$2400 + 320 + 120 + 16 = 2856$$

7. 36×73

×	70	3	
30	2100	90	
6	420	18	

$$2100 + 420 + 90 + 18 = 2628$$

8. 28×65

×	60	5	
20	1200	100	
8	480	40	

$$1200 + 480 + 100 + 40 = 1820$$

Challenge

×	50	8	
30	1500	240	
7	350	56	

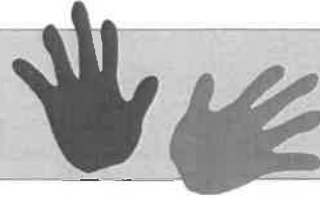
$$37 \times 58 = 2146$$

A Bit Stuck? Digit discovery

Work in pairs

Things you will need:

- A pencil



What to do:

- Use the grid method to work out the answers to these multiplications:

2×444 (you don't need the grid method for this one!)

3×444

4×444

5×444

6×444

7×444

8×444

9×444

- You can split the work up between you.
- Add the digits of each answer.
- What do you notice?

3×444				
x	400	40	4	
3	1200	120	12	1332

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

Now try multiplying 888 by 2, 3, 4... 9.

What do you notice about the answers? And the sums of the digits?

Learning outcomes:

- I can use the grid method to multiply 3-digit numbers by 1-digit numbers.
- I can look for patterns.

Investigation

Reverse digits, same product

1. Try these multiplications:
12 x 42 and 21 x 24.
2. Now try 12 x 84 and 21 x 48.
3. Now try 13 x 62 and 31 x 26.
4. Then try 23 x 96 and 32 x 69,
then 24 x 63 and 42 x 36.
5. What do you notice? Can you explain it?

Can you find another pair which 'work'
in the same way?

x	40	2	
10	400	20	= 504
2	80	4	

x	20	4	
20			
1			

Check your understanding

Questions

Choose a method to find:

$$50 \times 70 =$$

$$879 \times 3 =$$

$$71 \times 16 =$$

$$54 \times 23 =$$

$$2307 \times 4 =$$

A crate contains 27 boxes of oranges. There are 24 oranges in a box.
A supermarket orders 3 crates of oranges. How many oranges is this in total?

How many hours are there altogether in November and December?

Answers on next page

Check your understanding

Answers

Choose a method to find:

$$50 \times 70 = 3500 \quad (\text{Use times tables fact}).$$

$$879 \times 3 = 2637 \quad (\text{Short multiplication or grid}).$$

$$71 \times 16 = 1136 \quad (\text{Grid method}).$$

$$54 \times 23 = 1242 \quad (\text{Grid method}).$$

$$2307 \times 4 = 9228 \quad (\text{Short multiplication or a mental method: 'double and double again'}).$$

A crate contains 27 boxes of oranges. There are 24 oranges in a box.

A supermarket orders 3 crates of oranges. How many oranges is this in total?

1944 oranges in total. Note that this is a 2-step problem. Either solve by $27 \times 24 \times 3$ or multiply 27 or 24 by 3 first.

How many hours are there altogether in November and December?

1464 hours altogether. (61×24). (November has 30 days, December 31).

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. Listen to a story

- Listen to or watch **Eric** by Shaun Tan using the video of Ruth Merttens reading the book <https://www.youtube.com/watch?v=H71F0-QrpE> or the **PowerPoint** provided.
- What do you like about the story? Is there anything that you dislike about it? Does it remind you of anything that has happened to you? Does it remind you of any books that you have read?

2. Remind yourself about modal verbs

- Use **PowerPoint** on modal verbs. If this is not possible, use the Revision Card to remind yourself about these.
- Complete *Modal Verb Activity*. You could challenge yourself to write 5 or even 10 of your own sentences about Eric.

Well done! Share your sentences with a grown-up. Show them the modal verbs that you have used.

3. Practise reading the story yourself

- Read through Eric. Highlight the modal verbs that you can find in this writing. You can check your answers at the end of the pack.
- Practise reading the story, until you are really fluent.
- Share the story with somebody else and explain to them what is shown in the illustrations.

Try the Fun-Time Extras

- Can you find out some more about Shaun Tan? You could start at this website: <http://www.shauntan.net/books.html>
- Can you interview other people to find out about the strangest visitor they've ever had to their house?

Modal Verbs – Revision Card

Modal Verbs

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

	can	must	may
might		ought to	shall
	would	will	could
			should

Modal Verbs

Modal verbs are placed **before the verb** they are **modifying**.



I thought I **could hear** someone in the pantry.

You **might see** him there if you open the door.

He **should sleep** in the room that we gave him.

Using Modal Verbs

Modal verbs are useful for **expressing shades of meaning**.

I **could worry** about our visitor but I **will let** him just get on.

It is worrying but I intend not to interfere.

I **should tell** someone now but I **might wait** a few more days.

I feel obliged to tell someone but it's possible that I will wait a bit.

You **can ask** him to leave the pantry but **must you risk** upsetting him?

You are able to ask him but is it necessary?

Modal Verbs Activity

Modal verbs can express certainty, ability or obligation.
Add a modal verb to each sentence so that it makes sense.
You might need to change or add some words.

1. We decided that we _____ host a foreign exchange student.
2. We thought that we _____ make the house welcoming for him.
3. We thought they _____ appreciate what we had done for him
4. When he went in the pantry, we agreed that we _____ not disturb him.
5. We worried that he _____ not tell us if anything was wrong.
6. He _____ be described as very curious.
7. I thought that he _____ to see the city and its surrounds.
8. I thought that perhaps he _____ be interested in something other than the ground.
9. I do not know whether we _____ see him again.

Write at least 3 sentences of your own about Eric.
Each sentence must contain a modal verb.

Eric

Some years ago we had a foreign exchange student come to live with us. We found it very difficult to pronounce his name correctly, but he didn't mind. He told us to just call him 'Eric'.

We had repainted the spare room, bought new rugs and furniture and generally made sure everything would be comfortable for him. So I can't say why it was that Eric chose to sleep and study most of the time in our kitchen pantry.

'It must be a cultural thing,' said Mum. 'As long as he's happy.' We started storing food and kitchen things in other cupboards so we wouldn't disturb him.

But sometimes I wondered if Eric *was* happy; he was so polite that I'm not sure he would have told us if something bothered him. A few times I saw him through the pantry door gap, studying with silent intensity, and imagined what it must be like for him here in our country.

Secretly I had been looking forward to having a foreign visitor – I had so many things to show him. For once I could be a local expert, a fountain of interesting facts and opinions. Fortunately, Eric was very curious and had plenty of questions.

However, they weren't the kind of questions I had been expecting. Most of the time I could only say, 'I'm not really sure,' or 'That's just how it is.' I didn't feel very helpful at all.

I had planned for us to go on a number of weekly excursions together, as I was determined to show our visitor the best places in the city and its surrounds. I think Eric enjoyed these trips, but once again, it was hard to really know.

Most of the time Eric seemed more interested in small things he discovered on the ground. I might have found this a little exasperating, but I kept thinking about what Mum had said, about the cultural thing. Then I didn't mind so much.

Nevertheless, none of us could help but be bewildered by the way Eric left our home: a sudden departure early one morning, with little more than a wave and a polite goodbye. It actually took us a while to realise he wasn't coming back.

There was much speculation over dinner later that evening. Did Eric seem upset? Did he enjoy his stay? Would we ever hear from him again? An uncomfortable feeling hung in the air, like something unfinished, unresolved. It bothered us for hours, at least until one of us discovered what was in the pantry.

Go and see for yourself: it's still there after all these years, thriving in the darkness. It's the first thing we show any new visitors to our house. 'Look what our foreign exchange student left for us,' we tell them. 'It must be a cultural thing,' says Mum.

Eric – Modal Verbs Highlighted

Some years ago we had a foreign exchange student come to live with us. We found it very difficult to pronounce his name correctly, but he didn't mind. He told us to just call him 'Eric'.

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But sometimes I wondered if Eric *was* happy; he was so polite that I'm not sure he would have told us if something bothered him. A few times I saw him through the pantry door gap, studying with silent intensity, and imagined what it must be like for him here in our country.

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Nevertheless, none of us could help but be bewildered by the way Eric left our home: a sudden departure early one morning, with little more than a wave and a polite goodbye. It actually took us a while to realise he wasn't coming back.

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Go and see for yourself: it's still there after all these years, thriving in the darkness. It's the first thing we show any new visitors to our house. 'Look what our foreign exchange student left for us,' we tell them. 'It must be a cultural thing,' says Mum.

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 a version of Eric

- Watch this video version of Eric. You can follow the words as you do.
<https://www.vimeo.com/111187541>
- What do you think about this version. Does it work to have an actor playing the character of Eric? Is the narration well read?

2. Practise using modal verbs

- Use the *Revision Card* to remind yourself about modal verbs.
- Read *Eric Thoughts 1 and 2*. What are some of the differences between the two sets of answers? Highlight the modal verbs that have been used.
- Sort the modal verbs that you have found into *Certainty/Ability/Obligation*.

Well done! Show your answers to a grown-up. You can check them at the end of this pack. Talk with them about your own answers to the three questions about Eric.

3. Now for some writing

- Think about your own answers to the three questions about Eric.
- Write your answers in clear sentences. Use modal verbs as you do this.

Try the Fun-Time Extras

- Look at the *Endpapers*. These are Shaun Tan's drawings that he puts at the start and finish of his books. What is your favourite drawing? Could you make up a story about it?
- Could you make your own collection of sketches in this style?

Eric

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'It must be a cultural thing,' said Mum. 'As long as he's happy.' We started storing food and kitchen things in other cupboards so we wouldn't disturb him.

But sometimes I wondered if Eric was happy; he was so polite that I'm not sure he would have told us if something bothered him. A few times I saw him through the pantry door gap, studying with silent intensity, and imagined what it must be like for him here in our country.

Secretly I had been looking forward to having a foreign visitor – I had so many things to show him. For once I could be a local expert, a fountain of interesting facts and opinions. Fortunately, Eric was very curious and had plenty of questions.

However, they weren't the kind of questions I had been expecting. Most of the time I could only say, 'I'm not really sure,' or 'That's just how it is.' I didn't feel very helpful at all.

I had planned for us to go on a number of weekly excursions together, as I was determined to show our visitor the best places in the city and its surrounds. I think Eric enjoyed these trips, but once again, it was hard to really know.

Most of the time Eric seemed more interested in small things he discovered on the ground. I might have found this a little exasperating, but I kept thinking about what Mum had said, about the cultural thing. Then I didn't mind so much.

Nevertheless, none of us could help but be bewildered by the way Eric left our home: a sudden departure early one morning, with little more than a wave and a polite goodbye. It actually took us a while to realise he wasn't coming back.

There was much speculation over dinner later that evening. Did Eric seem upset? Did he enjoy his stay? Would we ever hear from him again? An uncomfortable feeling hung in the air, like something unfinished, unresolved. It bothered us for hours, at least until one of us discovered what was in the pantry.

Go and see for yourself: it's still there after all these years, thriving in the darkness. It's the first thing we show any new visitors to our house. 'Look what our foreign exchange student left for us,' we tell them. 'It must be a cultural thing,' says Mum.

Modal Verbs – Revision Card

Indicating Degrees of Certainty using Modal Verbs



He might **have come** from Outer Space.

He will **have come** from Outer Space. ✓

He may **have come** from Outer Space.

*The ticked sentence expresses most **certainty**.*

Indicating Degrees of Obligation using Modal Verbs



They should **report** him to the government.

They ought to **report** him to the government.

They must **report** him to the government. ✓

*The ticked sentence expresses the strongest degree of **obligation***

Indicating Ability using Modal Verbs



I might **understand** his mission.

I would **understand** his mission.

I can **understand** his mission. ✓

I must **understand** his mission.

*The ticked sentence indicates **ability**.*

Eric Thoughts 1

Why do you think the family decided to have a foreign exchange student?

I think that they might have wanted to be kind and hospitable. They repainted the spare room and bought new rugs and furniture which may show how much care they were taking. When Eric went in the pantry, they decide they ought not to disturb him. This seems generous. They could have told him to stay in his room. They seem flexible.

Where do you think Eric has come from?

I think he may have come newly arrived from another planet. He might not actually be the exchange student. He may have turned up at the same time coincidentally. I think he feels he should learn about his new planet, so it could be that he is an explorer. Perhaps he will return home with news of what he has discovered.

How do you think the narrator feels about Eric?

I think he might feel quite fond of Eric because of the way that he tells the story. He speaks of him quite gently. He should be looking after him. He must be quite confused though. Eric can behave very strangely! His appearance could really frighten someone.

Eric Thoughts 2

Why do you think the family decided to have a foreign exchange student?

I think that they may just want the money. They might have wanted to do up the house anyway and they would get paid for doing that. The narrator may be quite caring with Eric, but his Mum doesn't really say or do much. She should be more involved. She must have noticed that a strange creature is in her house. She could have told someone about it. Now no-one will ever know what sort of creature this was.

Where do you think Eric has come from?

I think he might have been visiting other people. He knows some of what he ought to do, for example he knows he should wave at people. He does that when he arrives. He must have learnt that from other visits. He could just go from house to house like this, one after another. Perhaps he will visit me one day!

How do you think the narrator feels about Eric?

I think he might feel quite confused about Eric. He has planned lots of things that they could do, but Eric doesn't seem to join in with them as he ought to do. He should have asked Eric where he comes from. Maybe he is a bit scared about what Eric will say. He could feel quite proud to have been visited by Eric. It will be a story that he will enjoy telling for the rest of his life.

Certainty/Ability/Obligation

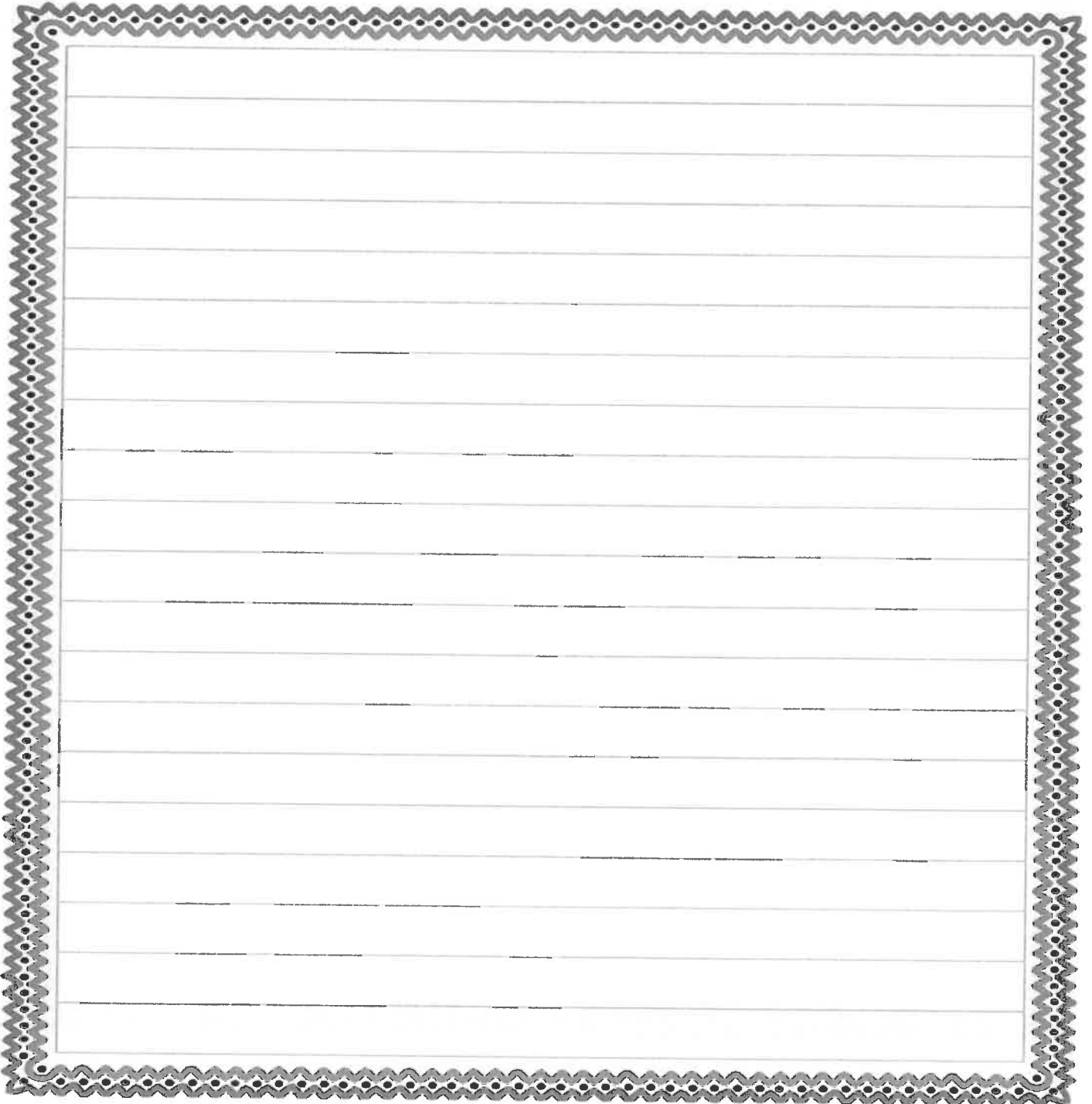
Sort the modal verbs that you have found into this table.

<u>Certainty</u>	<u>Ability</u>	<u>Obligation</u>

Eric – Your Thoughts

Use modal verbs in
your answers

1. Why do you think the family decided to have a foreign exchange student?
2. Where do you think Eric has come from?
3. How do you think the narrator feels about Eric?

A large rectangular area with a decorative border and horizontal lines for writing. The border is a repeating geometric pattern. Inside the border, there are 20 horizontal lines for writing, providing space for answers to the questions above.

A large rectangular area with a decorative border. The border is a thick, grey, zigzag line with small black dots at the peaks and valleys. Inside the border, there are 20 horizontal grey lines, creating 19 rows of space for writing. The lines are evenly spaced and extend across the width of the rectangle.

Eric Thoughts 1 - ANSWERS

Why do you think the family decided to have a foreign exchange student?

I think that they might have wanted to be kind and hospitable. They repainted the spare room and bought new rugs and furniture which may show how much care they were taking. When Eric went in the pantry, they decide they ought not to disturb him. This seems generous. They could have told him to stay in his room. They seem flexible.

Where do you think Eric has come from?

I think he may have come newly arrived from another planet. He might not actually be the exchange student. He may have turned up at the same time coincidentally. I think he feels he should learn about his new planet, so it could be that he is an explorer. Perhaps he will return home with news of what he has discovered.

How do you think the narrator feels about Eric?

I think he might feel quite fond of Eric because of the way that he tells the story. He speaks of him quite gently. He should be looking after him. He must be quite confused though. Eric can behave very strangely! His appearance could really frighten someone.

Eric Thoughts 2 - ANSWERS

Why do you think the family decided to have a foreign exchange student?

I think that they may just want the money. They might have wanted to do up the house anyway and they would get paid for doing that. The narrator may be quite caring with Eric, but his Mum doesn't really say or do much. She should be more involved. She must have noticed that a strange creature is in her house. She could have told someone about it. Now no-one will ever know what sort of creature this was.

Where do you think Eric has come from?

I think he might have been visiting other people. He knows some of what he ought to do, for example he knows he should wave at people. He does that when he arrives. He must have learnt that from other visits. He could just go from house to house like this, one after another. Perhaps he will visit me one day!

How do you think the narrator feels about Eric?

I think he might feel quite confused about Eric. He has planned lots of things that they could do, but Eric doesn't seem to join in with them as he ought to do. He should have asked Eric where he comes from. Maybe he is a bit scared about what Eric will say. He could feel quite proud to have been visited by Eric. It will be a story that he will enjoy telling for the rest of his life.

Certainty/Ability/Obligation - ANSWERS

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

Endpapers



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. Think about illustrations

- Look carefully at the *Illustrations*. These are from Eric by Shaun Tan.
- Read and think about the *Reflection Questions*.

2. Remind yourself about modal verbs

- Use the *Revision Card* to remind yourself about modal verbs.
- Now write some of the answers to the *Reflection Questions* as sentences that use modal verbs. Write at least 3 sentences. Challenge yourself to write 5 or more.

3. Make an illustration

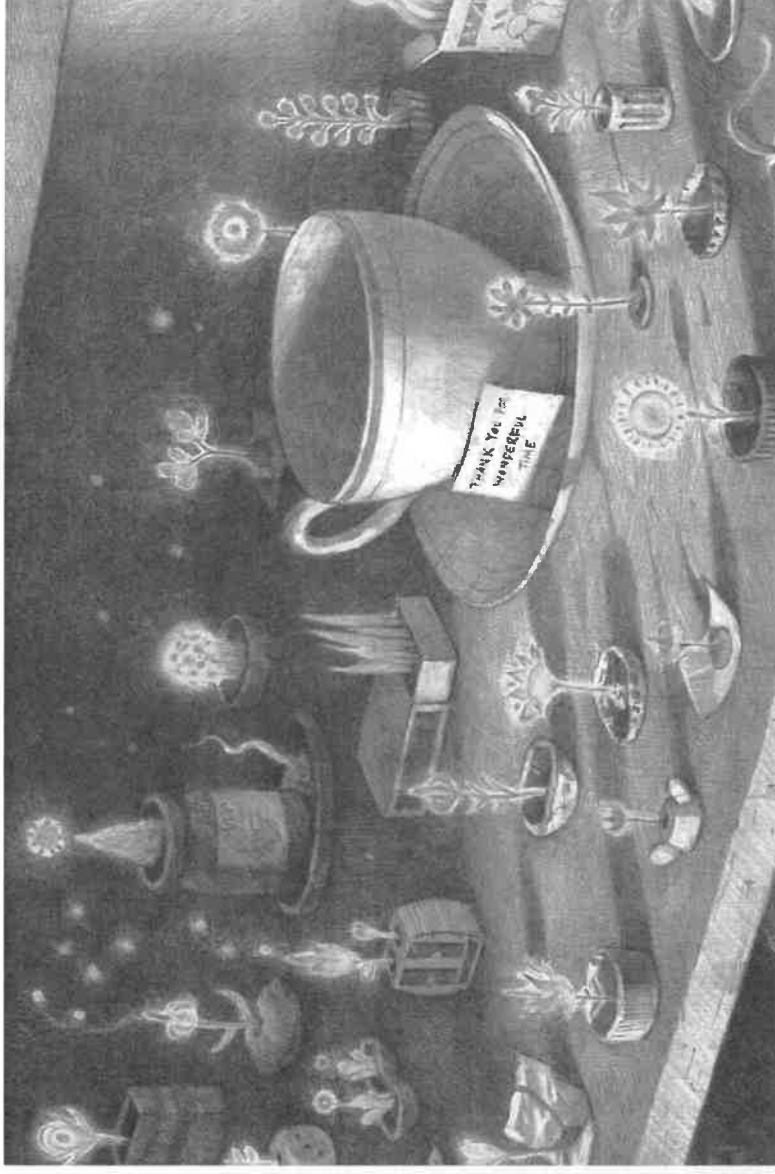
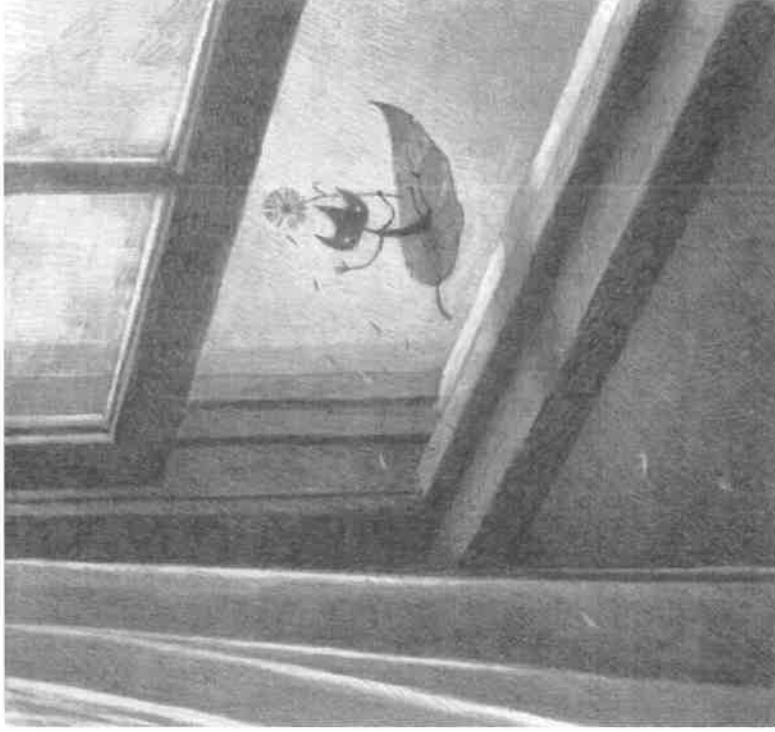
- Read *Illustration Brief*. Make an illustration showing where Eric might go next, who he may meet and what he could do.
- When you have finished your illustration write some sentences to go with it. Include modal verbs in your sentences.

Well done! Share your illustration and sentences with a grown-up. Show them the modal verbs that you have used.

Try the Fun-Time Extras

- Watch this animation of Eric's story.
<https://www.youtube.com/watch?v=S3x3Zn-qKSQ>
- Could you try to make your own version of the story? You could use photographs or you could use an animation.

Illustrations



Reflection Questions

What is powering Eric's leaf?

Was Eric upset?

Would they hear from him again?

How are the pantry plants powered?

Will they stay there for ever?

Modal Verb – Revision Card

Modal verbs show how possible or certain something might be. They can express certainty, ability or obligation.

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

Modal verbs are placed before the verb they are modifying.

I thought I might **ask** him where he had come from.

I knew he would **feel** scared.

He will **come** back one day, I hope.

I shall **remember** him forever.

I may **write** a book about him.

Illustration Brief

Make an illustration to show where Eric goes next, who he meets and what he does.

Include detail in your illustration so that it matches the style of Shaun Tan.

Write some sentences to accompany your illustration. They must include modal verbs.

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 a poem

- Look at the *Caged Bird* picture. Why do you think someone might keep a bird in a cage like that? What does it make you think?
- Read *Caged Bird – First Verses*. Read them twice: once in your head, once out loud. Each verse is just one sentence, so read so that it flows to the end.

2. Decide some Secret Strings

- Look at *Example Secret Strings*. Secret Strings are a way of showing how a word or phrase in a poem links with another word or phrase. You just spot a link and then use colours and highlights to show it.
- Read *Caged Birds – Other Verses*. Try adding secret strings. Any link that you can spot between words or phrases is OK.

*Well done! Show your Secret Strings to a grown-up and explain the links that you have spotted. They can read **Secret Strings Adult Reference** to understand them or watch Michael Rosen explain them (he invented the idea).*

<https://www.youtube.com/watch?v=M39LCHSHNDw> (from 1:38)

3. Answer some questions

- Read *Reflection Questions*. Think about your answers and then write them as sentences.

Try the Fun-Time Extras

- Make an illustration of the free bird, showing all it can do.
- Try learning some of the poem off-by-heart.

Caged Bird



Caged Bird – First Verses

A free bird leaps
on the back of the wind
and floats downstream
till the current ends
and dips his wing
in the orange sun rays
and dares to claim the sky.

But a bird that stalks
down his narrow cage
can seldom see through
his bars of rage
his wings are clipped and
his feet are tied
so he opens his throat to sing.

*Maya Angelou,
The Complete Collected Poems of Maya Angelou
Virago, 1995*

SECRET STRINGS EXAMPLE

Caged Bird – First Stanza

A free bird leaps
on the back of the wind
and floats downstream
till the current ends
and dips his wing
in the orange sun rays
and dares to claim the sky.

- Wind and wing – echoing words (they sound similar)
- Free bird leaps – contrasting assonance
- sun rays dares sky – alliteration (letter 's' at start and end)
- leaps/dares – strong verbs
- wind, stream, sun, sky – nouns to do with the natural world
- Floats downstream – contrasting assonance

Secret Strings: Adult Reference

Secret Strings is a way of thinking about poems explained by Michael Rosen in his book: *What is Poetry?* (2016 Walker Books).

He explains them as the way that poems bring words together.

They can include:

- Words sounding like one another (for example rhyme, alliteration or assonance)
- One line's rhythm echoing that of another
- Words or groups of words repeating
- Word pictures made by the similar or the same words being used (The picture or imagery of the poem)
- Opposites

Importantly, Michael Rosen says this:

“Remember, these strings belong to you. They may be strings that the poet had in mind – but maybe not.”

In Caged Bird example, these Secret Strings have been marked:

- Free bird leaps – contrasting assonance
- Wind and wing – echoing words (they sound similar)
- Floats downstream – contrasting assonance
- sun rays dares sky – alliteration
- leaps/dares – strong verbs
- wind, stream, sun, sky – nouns to do with the natural world

Caged Bird – Further Verses

The caged bird sings
with a fearful trill
of things unknown
but longed for still
and his tune is heard
on the distant hill
for the caged bird
sings of freedom.

The free bird thinks of another breeze
and the trade winds soft through the sighing trees
and the fat worms waiting on a dawn bright lawn
and he names the sky his own

But a caged bird stands on the grave of dreams
his shadow shouts on a nightmare scream
his wings are clipped and his feet are tied
so he opens his throat to sing.

The caged bird sings
with a fearful trill
of things unknown
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and his tune is heard
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Reflection Questions

Does this poem remind you of anything?

What can a free bird do that a caged bird can't?

What does a caged bird do that a free bird doesn't?

Which would you rather be?

Which do you most feel like?

What emotions do you think the poet felt as she wrote about the caged bird?

What emotions might she have felt as she wrote about the free bird?

Do you know someone who would love this poem? Why would they?

Do you know someone who would hate this poem? Why would they?

How can something be unknown yet longed for? Is there anything like that in your life?

What is your favourite phrase in this poem?

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 a profile

- Read *Maya Angelou – Author Profile*
- Which three facts about Maya Angelou do you think are most important? Write these in one sentence each. Why do you think this?

2. Watch three video performances of the poem

- Watch these three video performances of the poem:
<https://www.youtube.com/watch?v=-pAxGbTwFm4>
<https://www.youtube.com/watch?v=Adg9rS4rVjl>
<https://www.youtube.com/watch?v=rZzOxWAXde0>
- Make some *Notes* about these performances. What did you notice and like? Was there anything that you disliked?

3. Practise performing the poem

- Practise reading the poem out loud.
- Work on the first verse. Decide which words to emphasise and what expression you will use. Practise until you can speak really confidently.
- Challenge yourself to read the other verses just as well.

Well done! Read the poem to someone. What do they like about your performance?

Try the Fun-Time Extras

- Make a recording of your performance and share it with someone else.
- Use this website to find out more about Maya Angelou and make a poster about her like. https://kids.kiddle.co/Maya_Angelou

Maya Angelou – Author Profile



Maya Angelou was born in Missouri in the southern USA in 1928. She was the descendant of generations of people who had been imprisoned as slaves.

She experienced many difficulties in her family when she was growing up and was very often treated unfairly.

She worked at all sorts of jobs once she had left school, including as a cook, as a dancer and singer, as a journalist and as a campaigner for civil rights. She also directed films and acted in the theatre!

From very early on she had loved reading, memorising poetry and writing, and published her first book in the 1960s. She was famous for her memoirs and autobiographical pieces, the first of which was called *I Know Why The Caged Bird Sings*.

Caged Bird

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till the current ends
and dips his wing
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and dares to claim the sky.

But a bird that stalks
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Notes

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1.	https://www.youtube.com/watch?v=-pAxGbTwFm4		
2.	https://www.youtube.com/watch?v=Adg9rS4rVlI		
3.	https://www.youtube.com/watch?v=rZzOxWAXde0		