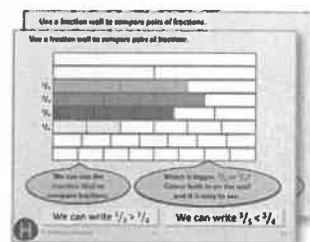


# Week 7, Day 1

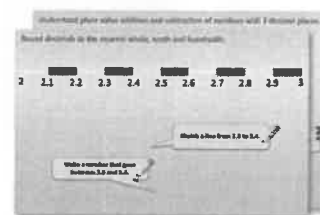
## Multiply multiples of 10 and 100 (1)

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.

Practice Sheet (Mild)	
Please solve addition and subtraction	
1. $4538 + 82$	2. $4538 + 88$
3. $4538 + 808$	4. $4538 + 882$
5. $4231 + 811$	6. $4231 + 8101$
7. $4231 + 8111$	8. $846 + 8211$
9. $846 + 815$	10. $846 + 8113$
11. $846 + 8301$	12. $4789 + 8801$

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

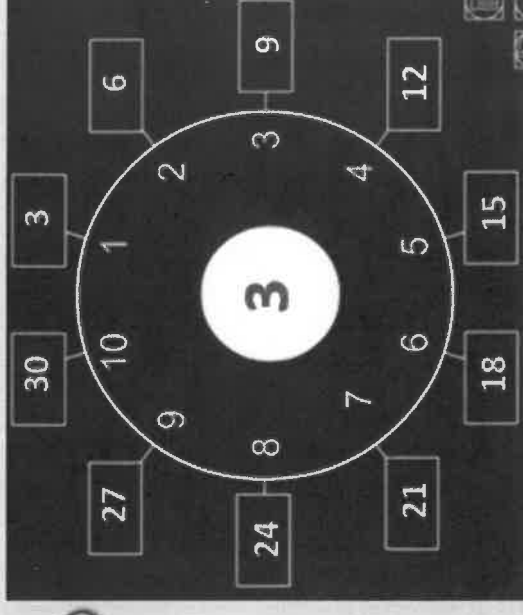


4. Think you've cracked it? Whizzed through the Practice Sheets?  
Have a go at the Investigation...

## Learning Reminders

Use tables facts and place value to multiply multiples of 10 by 1-digit numbers.

Let's count around the number dial in 3s...

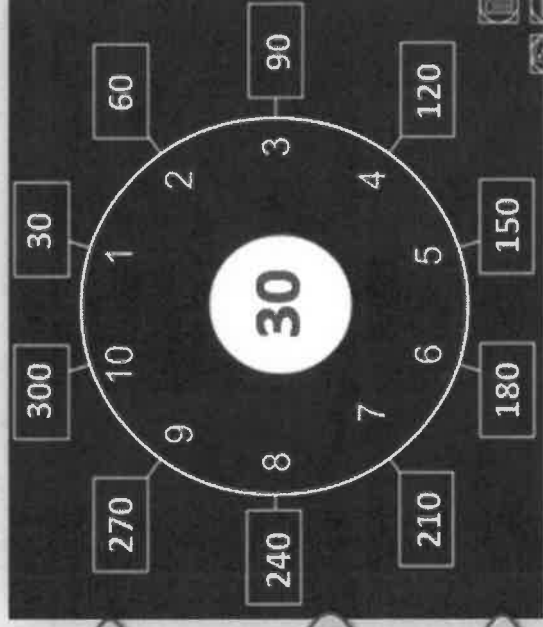


Use tables facts and place value to multiply multiples of 10 by 1-digit numbers.

Now let's try 30s...

What was the same?  
What was different?

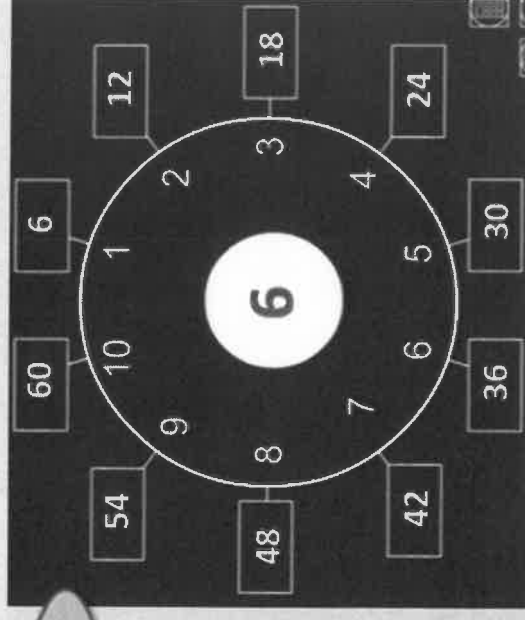
How many times  
bigger are the 30s?



# Learning Reminders

Use tables facts and place value to multiply multiples of 10 by 1-digit numbers.

Let's count around the number dial in 6s...

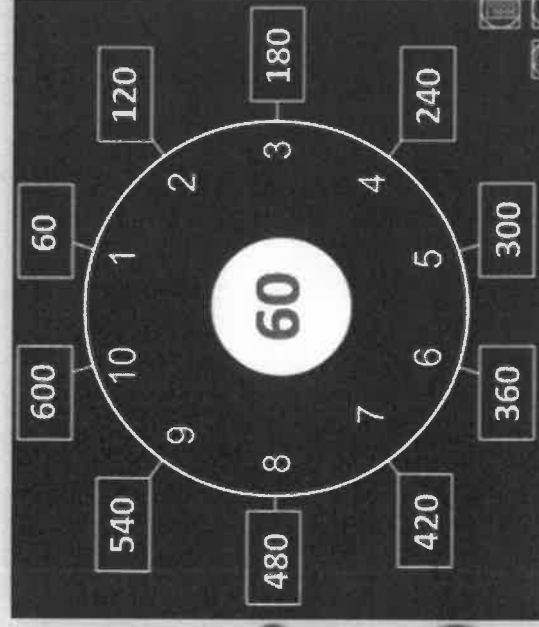


Use tables facts and place value to multiply multiples of 10 by 1-digit numbers.

Now let's try 60s...

How many times bigger are the 60s?

If you know the 6 times table, you can use place value to work out the 60s!



## Learning Reminders

Use tables facts and place value to multiply multiples of 10 and 100 by 1-digit numbers.

0	9	18	27	36	45	54	63	72	81	90
0	90	180	270	360	450	540	630	720	810	900
0	900	1800	2700	3600	4500	5400	6300	7200	8100	9000

Let's count in 9s on the counting stick.

Now let's try it in 90s.

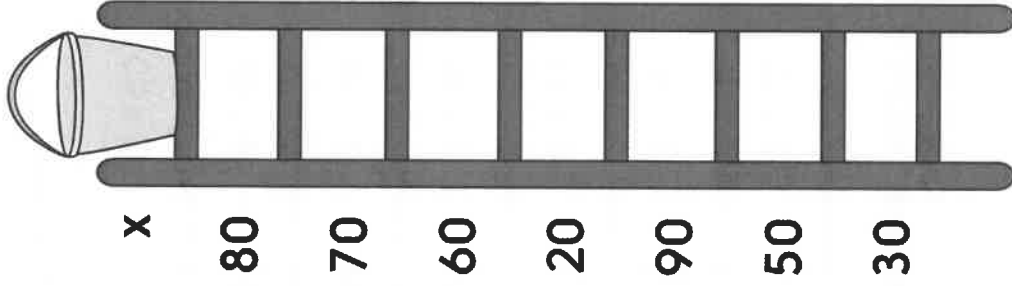
Now let's try it in 900s!

If you know the 9 times table you can use place value to find the 90s and 900s.

## Practice Sheet Mild

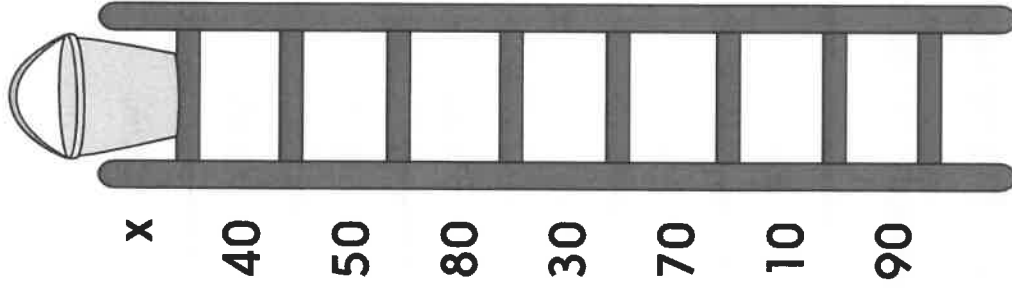
### Ladders of 10s

Roll a dice (if you roll 1, roll again). Write the number rolled in the bucket at the top of the ladder. Now multiply each multiple of 10 on the ladder by this number. Repeat for each ladder, making sure you put a different number in the bucket each time.



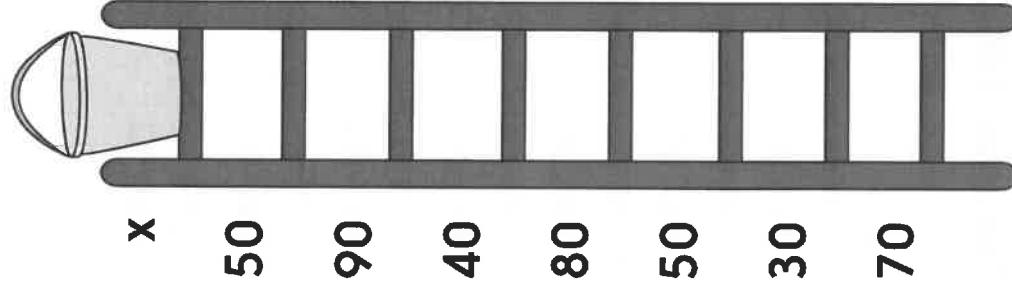
x

80  
70  
60  
20  
90  
50  
30



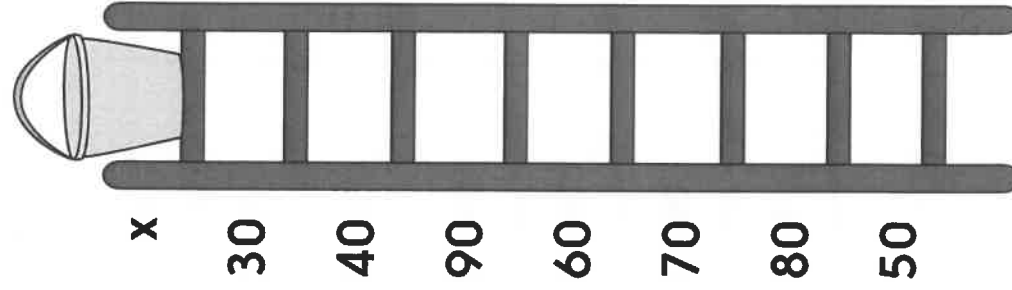
x

40  
50  
80  
30  
70  
10  
90



x

50  
90  
40  
80  
50  
30  
70



x

30  
40  
90  
60  
70  
80  
50

## Practice Sheet Hot

### Multiplication by 10s and 100s

Answer as many of these questions as you can!

1	$3 \times 40$	2	$6 \times 40$	3	$2 \times 400$	4	$3 \times 400$
5	$5 \times 30$	6	$4 \times 30$	7	$6 \times 300$	8	$7 \times 300$
9	$4 \times 50$	10	$6 \times 50$	11	$3 \times 500$	12	$7 \times 500$
13	$3 \times 60$	14	$6 \times 60$	15	$4 \times 600$	16	$8 \times 600$
17	$3 \times 70$	18	$6 \times 70$	19	$4 \times 700$	20	$8 \times 700$
21	$5 \times 80$	22	$8 \times 80$	23	$9 \times 800$	24	$7 \times 800$
25	$2 \times 90$	26	$5 \times 90$	27	$6 \times 900$	28	$9 \times 900$

#### Challenge

Write as many multiplication facts as you can with the answer 480.  
Repeat for 2400.

## Practice Sheets Answers

### Ladders of 10s (mild)

Children's answers will vary depending on the number of the dice.

### Multiplication by 10s and 100s (hot)

- |         |         |          |          |
|---------|---------|----------|----------|
| 1. 120  | 2. 240  | 3. 800   | 4. 1200  |
| 5. 150  | 6. 120  | 7. 1800  | 8. 2100  |
| 9. 200  | 10. 300 | 11. 1500 | 12. 3500 |
| 13. 180 | 14. 360 | 15. 2400 | 16. 4800 |
| 17. 210 | 18. 420 | 19. 2800 | 20. 5600 |
| 21. 400 | 22. 640 | 23. 7200 | 24. 5600 |
| 25. 180 | 26. 450 | 27. 5400 | 28. 8100 |

#### Challenge

$480 = 1 \times 480, 2 \times 240, 3 \times 160, 4 \times 120, 5 \times 96, 6 \times 80, 8 \times 60, 10 \times 48,$   
 $12 \times 40, 15 \times 32, 16 \times 30, 20 \times 24$

$2400 = \text{e.g. } 6 \times 400, 4 \times 600, 3 \times 800, 8 \times 300, 2 \times 1200, 12 \times 200, 60 \times 40,$   
 $40 \times 60, 30 \times 80, 80 \times 30, 20 \times 120$

## A Bit Stuck? Moving multiplications

*Work in pairs*

### Things you will need:

- A set of 0 to 12 cards
- Multiples strips
- A pencil



### What to do:

- Choose a pair of times tables.  
Find that table.
- Shuffle a pack of 0 to 12 cards and place face down.
- Turn the cards over one at a time.
- Write the number in the left column of the table.
- Multiply that number by the two numbers in the table, e.g. 2 and 20.
- Write the answers on the table.
- Repeat with another pair of tables.

	$\times 2$	$\times 20$
3	6	60
0	0	0
8	16	160
4	8	

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

Try and fill in ALL the tables!

### Learning outcomes:

- I can use times tables and place value to multiply by 20 and 50.
- I am beginning to multiply by 30 and 40.



**A Bit Stuck?**  
Moving multiplications

	x2	x20

	x5	x50

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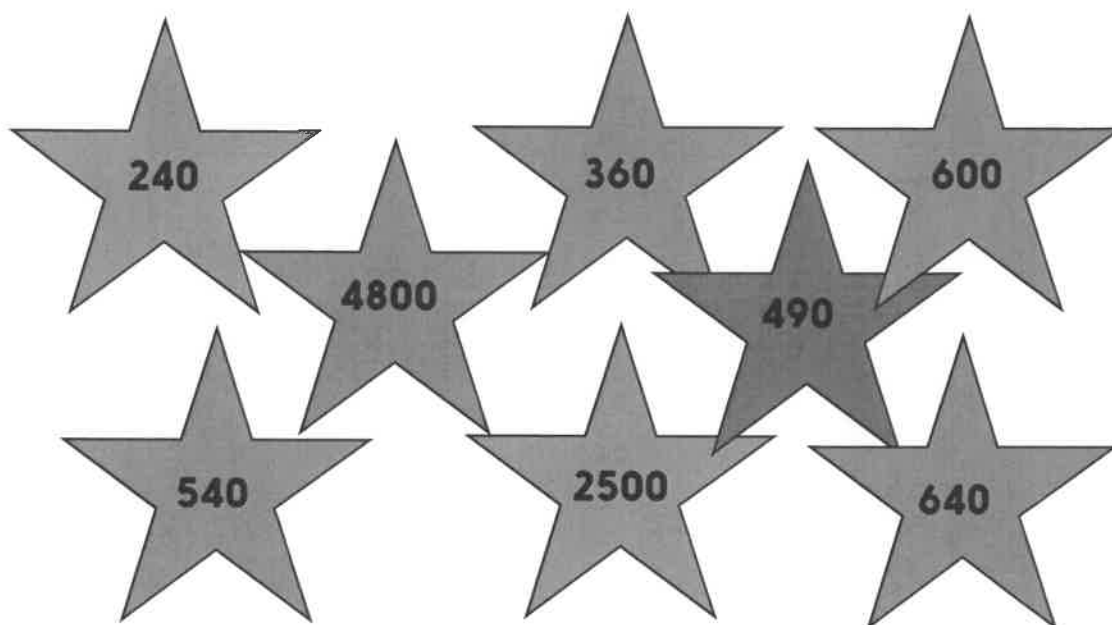
[illegible]

# **A Bit Stuck?** **Moving multiplications**

	x3	x30

	x4	x40

## Investigation Multiplication madness



- Choose a number. Write a multiplication with this as an answer, e.g. Choose 240, write  $4 \times 60 = 240$ .
- Write as many other multiplications as you can with this same answer.
- Repeat for a number which you think might have **more** multiplications.
- Repeat for a number which you think might have **fewer** multiplications.

Now for the mad bit...

- Choose other numbers and just write as many multiplications as you can with these answers.
- Fill the page as quickly as you can!

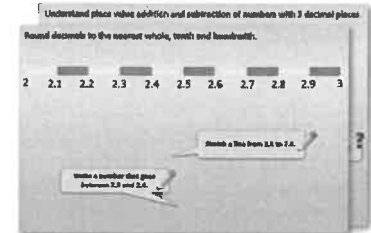


# Week 7, Day 2

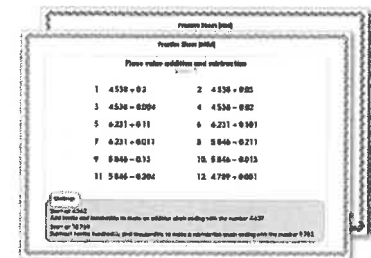
## Multiply multiples of 10 and 100 (2)

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 multiples of 10 and 100 by 1-digit numbers using tables facts.

$$3 \times 5 \quad 3 \times 50 \quad 3 \times 500$$

$$3 \times 5 = 15$$

So how can we use that to find  $3 \times 50$ ?

It's 10 times bigger!

$$3 \times 50 = 3 \times 5 \times 10 = 150.$$

How can we use  $3 \times 5$  to find  $3 \times 500$ ?

It's 100 times bigger!

$$3 \times 500 = 3 \times 5 \times 100 = 1500.$$

$$3 \times 5 = 15.$$

$$3 \times 50 = 150.$$


$$3 \times 500 = 1500.$$

## Learning Reminders

**Multiply multiples of 10 and 100 by 1-digit numbers using tables facts.**

$$4 \times 8 \quad 4 \times 80 \quad 4 \times 800$$

$$7 \times 3 \quad 7 \times 30 \quad 7 \times 300$$



Now try these sets  
of questions.

Compare your answers.  
What do you notice?

Once you know  $4 \times 8 = 32$   
and  $7 \times 3 = 21$  you can use  
place value to find the  
others!


**Answers**

$$4 \times 8 = 32$$
$$4 \times 80 = 320$$
$$4 \times 800 = 3200$$

$$7 \times 3 = 21$$
$$7 \times 30 = 210$$
$$7 \times 300 = 2100$$


## Learning Reminders

**Multiply multiples of 10 and 100 by 1-digit numbers using tables facts. Write inverse division sentences.**



What is  $40 \times 6$ ?

If we know  $40 \times 6 = 240$   
what division sentences  
can we write?



We could group 240 into  
6s or 40s.

$240 \div 6 = 40$  and  $240 \div 40 = 6$ .



## Practice Sheet Mild

### Multiplication by 10s and 100s

Choose a box on the grid.

Complete the multiplication and write it and the answer in your book.

Try to complete the whole grid!

$5 \times 30$	$6 \times 20$	$5 \times 40$	$2 \times 80$
$1 \times 160$	$2 \times 60$	$5 \times 20$	$3 \times 50$
$3 \times 40$	$4 \times 30$	$12 \times 10$	$1 \times 120$
$2 \times 70$	$10 \times 12$	$4 \times 50$	$9 \times 10$

Did you find any particularly easy?

#### Challenge

Colour the multiplications with an answer of 120.

What pattern do these make?

Write four multiplications that all have the answer 200.

## Practice Sheet Hot Multiplication by 10s and 100s

Choose a number on the grid.

Write a multiplication with that number as the answer.

If you are happy it is correct, colour that number on the grid. Repeat this four times so that you have shaded a cross of coloured squares on the grid.

	1200	540	
210	2100	280	2800
360	3600	560	4800
	2500	420	

### Challenge

The number 600 is the answer to 12 different multiplications!  
Can you find them all?

## Practice Sheet Answers

### Multiplication by 10s and 100s (mild)

$5 \times 30 =$ 150	$6 \times 20 =$ 120	$5 \times 40 =$ 200	$2 \times 80 =$ 160
$1 \times 160 =$ 160	$2 \times 60 =$ 120	$5 \times 20 =$ 100	$3 \times 50 =$ 150
$3 \times 40 =$ 120	$4 \times 30 =$ 120	$12 \times 10 =$ 120	$1 \times 120 =$ 120
$2 \times 70 =$ 140	$10 \times 12 =$ 120	$4 \times 50 =$ 200	$9 \times 10 =$ 90

#### Challenge

The multiplications with an answer of 120 make a cross in the grid.

Answers could include 4 of the following:

$20 \times 10 = 200$

$2 \times 100 = 200$

$40 \times 5 = 200$

$50 \times 4 = 200$

$200 \times 1 = 200$

$8 \times 25 = 200$

### Multiplication by 10s and 100s (hot)

Accept answers similar to:

	$3 \times 400 =$ 1200	$6 \times 90 =$ 540	
$7 \times 30 =$ 210	$7 \times 300 =$ 2100	$4 \times 70 =$ 280	$4 \times 700 =$ 2800
$6 \times 60 =$ 360	$6 \times 600 =$ 3600	$7 \times 80 =$ 560	$8 \times 600 =$ 4800
	$5 \times 500 =$ 2500	$7 \times 60 =$ 420	

#### Challenge

$600 = 1 \times 600, 2 \times 200, 4 \times 150, 5 \times 120, 6 \times 100, 8 \times 75, 10 \times 60, 12 \times 50, 15 \times 40, 20 \times 30, 24 \times 25$

Do not expect children to find all of these in Year 4.

## A Bit Stuck? Ladders to success

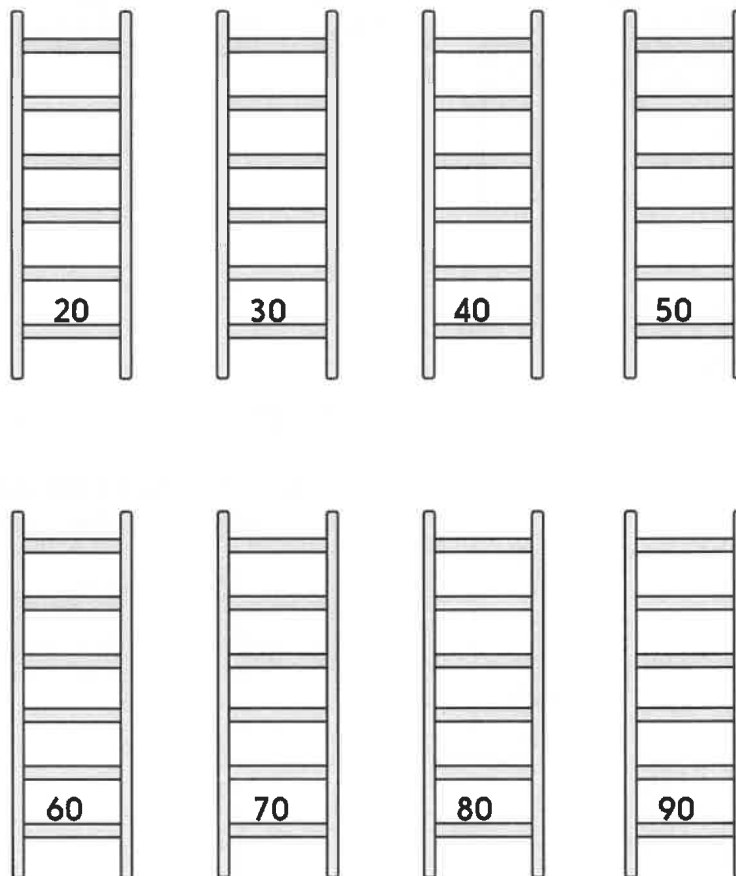
Things you will need:

- A pencil



What to do:

- Count in steps of 20, 30, 40, 50, 60, 70 and 80 to work out what number belongs on the top rung.



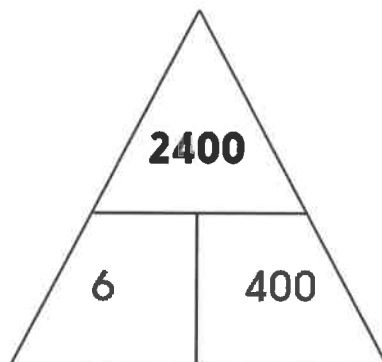
***S-t-r-e-t-c-h:***

Draw your own ladder with a number in the 30 times table at the top. Ask your partner to work out what number belongs on the bottom rung. Swap roles and repeat.

Learning outcomes:

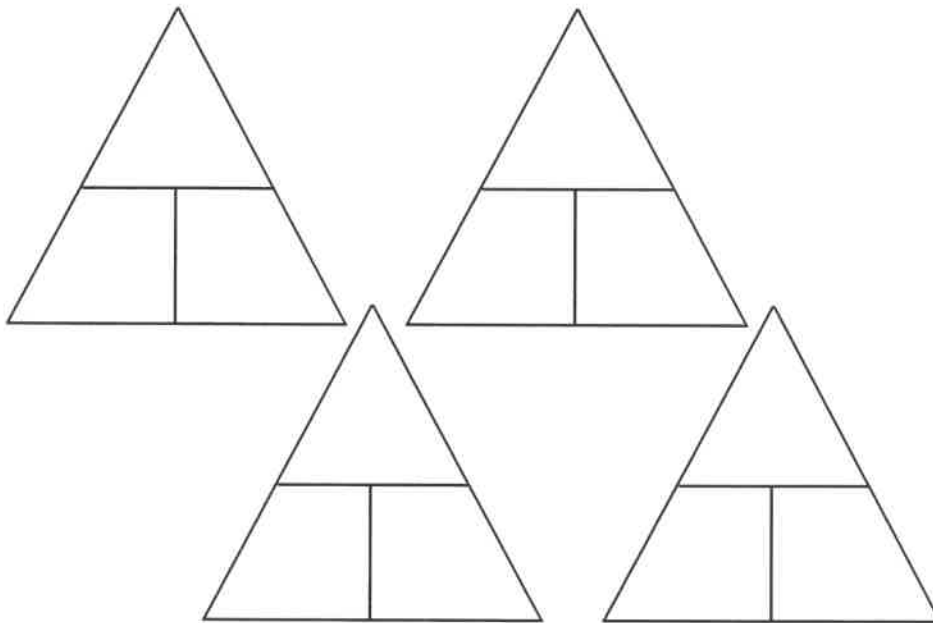
- I can count in steps of multiples of 10.

## Investigation Number triangles



The numbers in this triangle are related – the number at the top is the product of the other two. What multiplications and divisions can you write to go with it?

Draw other triangles with 2400 at the top...



What other triangles could you draw with 400 on the right?

### Over to you...

Think of your own number to go at the top. It must be a 4-digit multiple of 100, e.g. 1600, 4200, 3500, etc.

*Draw as many number triangles as you can for your number.*

Now think of a new number to go at the top.

Can you think of a number which means you can draw more triangles?

*Your challenge is to draw 12 different triangles for one number!*

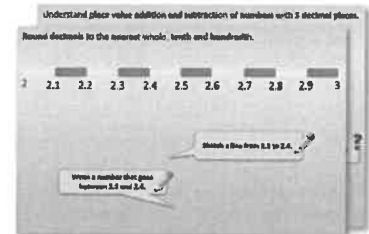


# Week 7, Day 3

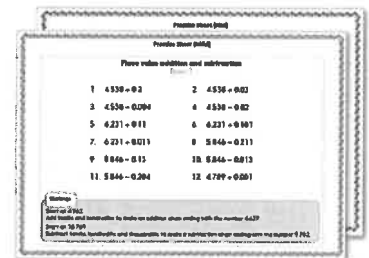
## Mental multiplication and division

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

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



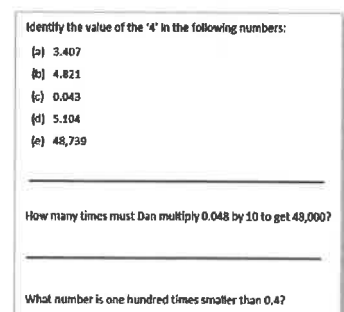
2. Tackle the questions on the Practice Sheet. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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



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



## Learning Reminders

Use times tables and place value to multiply and divide.

$$7 \times 5 = 35 \quad 3 \times 8 = 24 \quad 6 \times 7 = 42 \quad 4 \times 9 = 36$$



What is  $240 \div 3$ ?  
Which number fact can help?

If  $3 \times 8 = 24$  then  
 $3 \times 80$  is 240. So  
 $240 \div 3 = 80$ .

We can count in 80s to  
check... 80, 160, 240.  
3 lots of 80 are 240.

Now try  $420 \div 7$

Answer  
 $42 \div 7 = 6$  so,  $420 \div 7 = 60$



## Learning Reminders


Use times tables and place value to multiply and divide

$$7 \times 5 = 35 \quad 3 \times 8 = 24 \quad 6 \times 7 = 42 \quad 4 \times 9 = 36$$



Now find  $350 \div 7$ .  
Which number fact  
can help?

If  $7 \times 5 = 35$ ,  $35 \div 7 = 5$ .  
So the answer must be  
50, can you see why?



Now try  $420 \div 6$   
and  $360 \div 4$ .

Can you explain why  
 $420 \div 6 = 70$ ?

$42 \div 6 = 7$ , so  
 $420 \div 6 = 70$ .

Can you explain why  
 $360 \div 4 = 90$ ?

$36 \div 4 = 9$ , so...

## Practice Sheet Mild

### Multiplying 10s and 100s by 1-digit numbers

#### Section 1

$6 \times 2 = \boxed{\phantom{00}}$

$3 \times 5 = \boxed{\phantom{00}}$

$4 \times 9 = \boxed{\phantom{00}}$

$2 \times 2 = \boxed{\phantom{00}}$

$9 \times 3 = \boxed{\phantom{00}}$

$5 \times 4 = \boxed{\phantom{00}}$

$6 \times 20 = \boxed{\phantom{00}}$

$3 \times 50 = \boxed{\phantom{00}}$

$4 \times 90 = \boxed{\phantom{00}}$

$2 \times 200 = \boxed{\phantom{00}}$

$9 \times 300 = \boxed{\phantom{00}}$

$5 \times 400 = \boxed{\phantom{00}}$

$\boxed{\phantom{00}} \div 6 = 20$

$\boxed{\phantom{00}} \div 3 = 50$

$\boxed{\phantom{00}} \div 4 = 90$

$\boxed{\phantom{00}} \div 2 = 200$

$\boxed{\phantom{00}} \div 9 = 300$

$\boxed{\phantom{00}} \div 5 = 400$

#### Section 2

$4 \times 4 = \boxed{\phantom{00}}$

$3 \times \boxed{\phantom{00}} = 21$

$6 \times 8 = \boxed{\phantom{00}}$

$4 \times 40 = \boxed{\phantom{00}}$

$3 \times \boxed{\phantom{00}} = 2100$

$6 \times 80 = \boxed{\phantom{00}}$

$\boxed{\phantom{00}} \div 4 = 40$

$2100 \div 3 = \boxed{\phantom{00}}$

$\boxed{\phantom{00}} \div 6 = 80$

## Practice Sheet Hot

### Multiplying 10s and 100s by 1-digit numbers

#### Section 1

$\square \times 6 = 54$

$\square \times 600 = 5400$

$5400 \div \square = 600$

$7 \times 9 = \square$

$7 \times 900 = \square$

$\square \div 7 = 900$

$8 \times \square = 24$

$8 \times \square = 240$

$240 \div 8 = \square$

#### Section 2

$7 \times \square = 28$

$7 \times \square = 280$

$280 \div 7 = \square$

$6 \times 7 = \square$

$6 \times 70 = \square$

$\square \div 6 = 70$

$\square \times 8 = 64$

$\square \times 800 = 6400$

$6400 \div \square = 800$

$11 \times 6 = \square$

$1100 \times 6 = \square$

$\square \div 6 = 1100$

$4 \times \square = 48$

$4 \times \square = 480$

$480 \div 4 = \square$

$\square \times 9 = 108$

$\square \times 9 = 10,800$

$10,800 \div 9 = \square$

## Practice Sheets Answers

### Multiplying 10s and 100s by 1-digit numbers (mild)

#### Section 1

$6 \times 2 = 12$

$6 \times 20 = 120$

$120 \div 6 = 20$

$3 \times 5 = 15$

$3 \times 50 = 150$

$150 \div 3 = 50$

$4 \times 9 = 36$

$4 \times 90 = 360$

$360 \div 4 = 90$

$2 \times 2 = 4$

$2 \times 200 = 400$

$400 \div 2 = 200$

$9 \times 3 = 27$

$9 \times 300 = 2700$

$2700 \div 9 = 300$

$5 \times 4 = 20$

$5 \times 400 = 2000$

$2000 \div 5 = 400$

#### Section 2

$4 \times 4 = 16$

$4 \times 40 = 160$

$160 \div 4 = 40$

$3 \times 7 = 21$

$3 \times 700 = 2100$

$2100 \div 3 = 700$

$6 \times 8 = 48$

$6 \times 80 = 480$

$480 \div 6 = 80$

### Multiplying 10s and 100s by 1-digit numbers (hot)

#### Section 1

$9 \times 6 = 54$

$9 \times 600 = 5400$

$5400 \div 9 = 600$

$7 \times 9 = 63$

$7 \times 900 = 6300$

$6300 \div 7 = 900$

$8 \times 3 = 24$

$8 \times 30 = 240$

$240 \div 8 = 30$

#### Section 2

$7 \times 4 = 28$

$7 \times 40 = 280$

$280 \div 7 = 40$

$6 \times 7 = 42$

$6 \times 70 = 420$

$420 \div 6 = 70$

$8 \times 8 = 64$

$8 \times 800 = 6400$

$6400 \div 8 = 800$

$11 \times 6 = 66$

$1100 \times 6 = 6600$

$6600 \div 6 = 1100$

$4 \times 12 = 48$

$4 \times 120 = 480$

$480 \div 4 = 120$

$12 \times 9 = 108$

$1200 \times 9 = 10,800$

$10,800 \div 9 = 1200$

## A Bit Stuck? The 60 times table

Write out the 60 times table up to  $10 \times 60$ .  
Use your 6 times table and multiplying by 10 to help.

$$\begin{aligned}1 \times 60 &= 60 \\2 \times 60 &= 120 \\3 \times 60 &= \dots\end{aligned}$$

### Answer these questions

How many 60s are in 240?

How many 60s are in 360?

How many 60s are in 480?

There are <u>        </u> 60s in 240.
There are <u>        </u> 60s in 360.
There are <u>        </u> 60s in 480.

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

Use what you have written to answer these questions:

$180 \div 60 =$ <input type="text"/>	$180 \div 3 =$ <input type="text"/>
$420 \div 60 =$ <input type="text"/>	$420 \div 7 =$ <input type="text"/>
$540 \div 60 =$ <input type="text"/>	$540 \div 9 =$ <input type="text"/>

## Check your understanding

### Questions

Write  $360 \div \square = \square$  then complete the sentence in at least four different ways.

---

Jimmy writes:  $40 \times 5 = 2000$ .

Is he correct? What might he not understand yet?

---

Write three mega-facts to match  $4 \times 8 = 32$ .

At least one must be a division fact!

---

'Fact families'... Which four number sentences link these numbers:

5600, 8, 700 ?

And these: 4000, 50, 80?

---

---

## Check your understanding:

### Answers

Write  $360 \div \square = \square$  then complete the sentence in at least four different ways.

Children should use their knowledge of factors of 36.

Possible solutions:

$360 \div 2 = 180$ ,  $360 \div 3 = 120$ ,  $360 \div 4 = 90$ ,  $360 \div 6 = 60$ ,

$360 \div 9 = 40$ ,  $360 \div 12 = 30$ ,  $360 \div 18 = 20$ .

360 can also be divided by each of those answers, e.g.  $360 \div 180 = 2$ ,  $360 \div 120 = 3$  etc.

---

Jimmy writes:  $40 \times 5 = 2000$ .

Is he correct? What might he not understand yet?

He is not correct since the answer is 200. He may have misread the question as  $40 \times 50$  or made a place value error.

---

Write three LARGE or mega-facts to match  $4 \times 8 = 32$ .

At least one must be a division fact!

Examples include  $40 \times 8 = 320$ ,  $4 \times 80 = 320$ ,  $400 \times 8 = 3200$ ,  $4 \times 800 = 3200$ ,  $40 \times 80 = 3200$  and any division linked to one of those.

---

'Fact families'... Which four number sentences link these numbers:

5600, 8, 700

$700 \times 8 = 5600$ ,  $8 \times 700 = 5600$ ,  $5600 \div 8 = 700$ ,  $5600 \div 700 = 8$ .

And these: 4000, 50, 80

$50 \times 80 = 4000$ ,  $80 \times 50 = 4000$ ,  $4000 \div 80 = 50$ ,  $4000 \div 50 = 80$ .



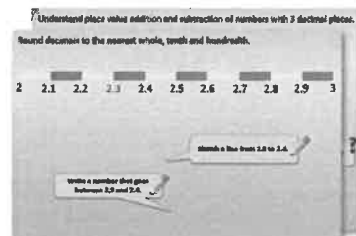


## Week 7, Day 5

### Symmetrical shapes

**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.

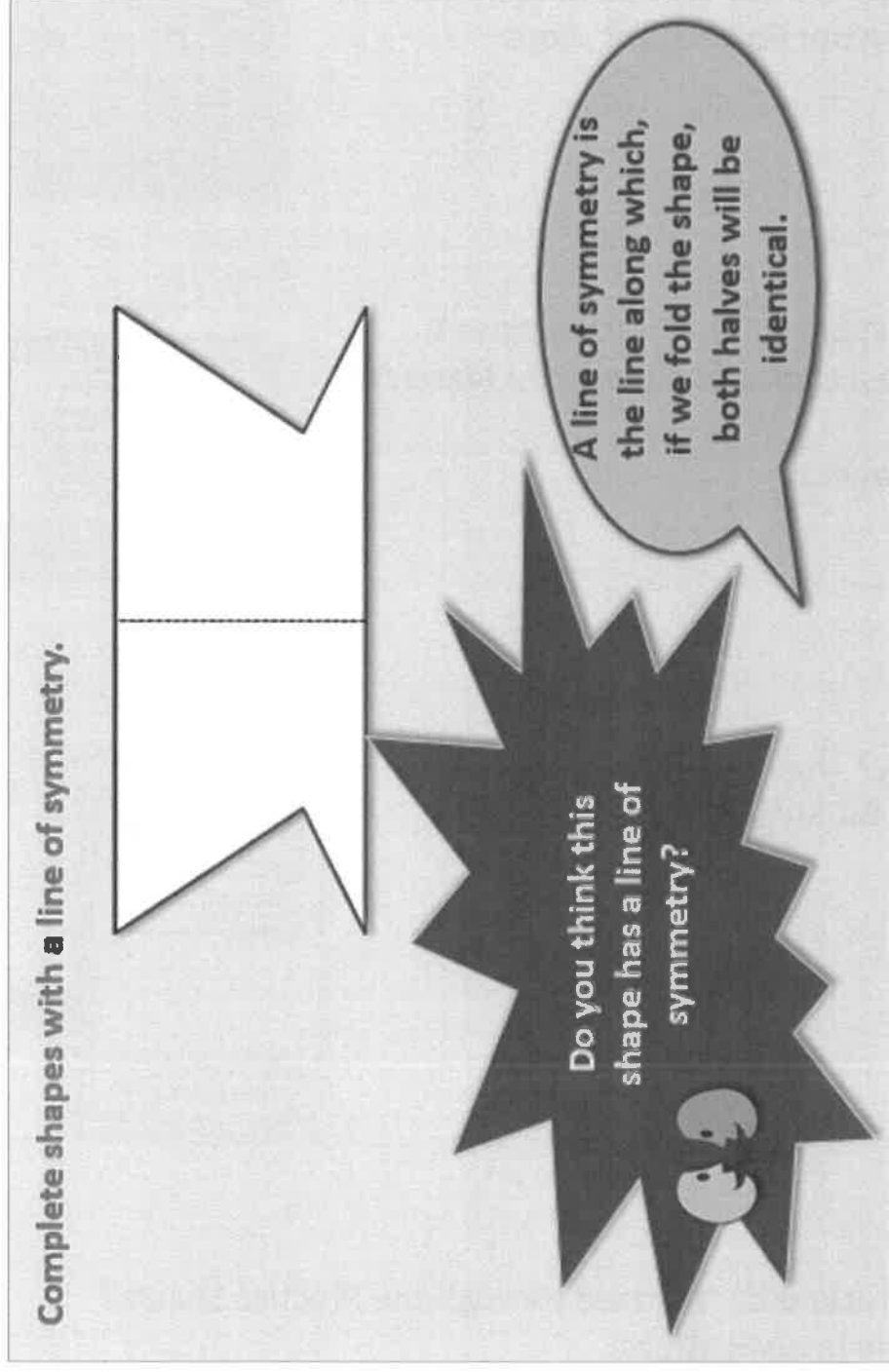
[illegible]

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

[illegible]

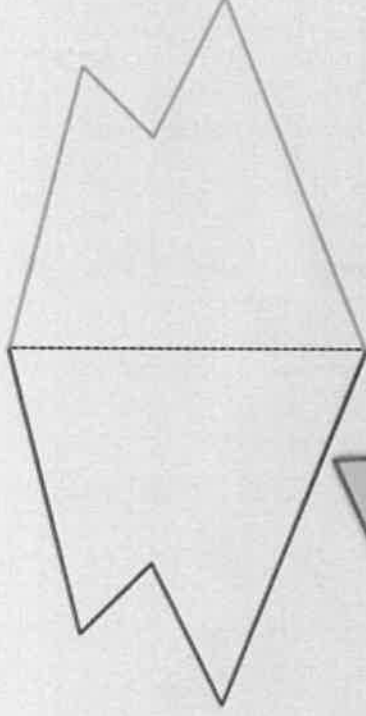
- 4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the Investigation...**

## Learning Reminders



## Learning Reminders

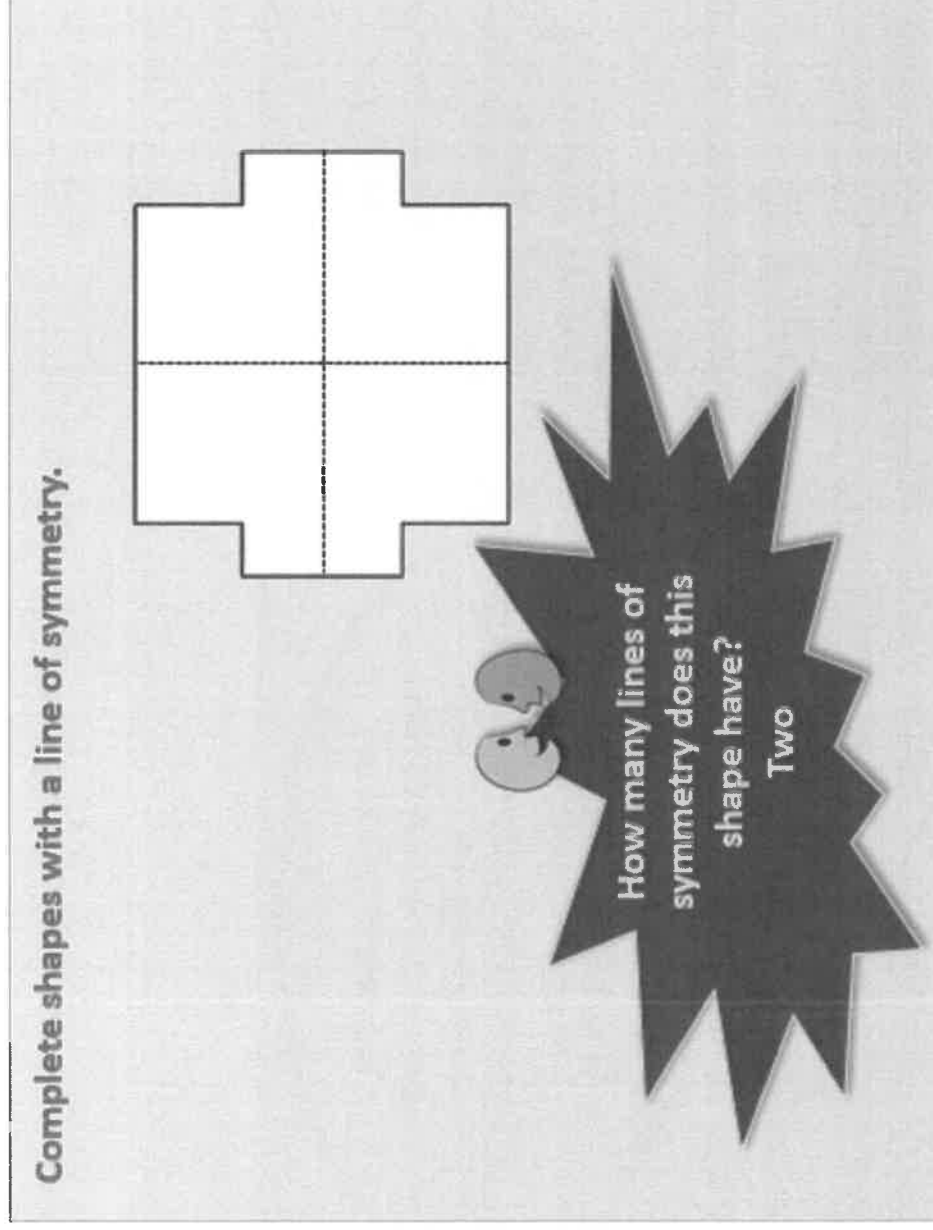
Complete shapes with a line of symmetry.



This is one half of an irregular octagon. When complete, this octagon is symmetrical. Let's sketch what the other half of this shape will look like.

Try to imagine the complete shape folded along this line. The two halves should match.

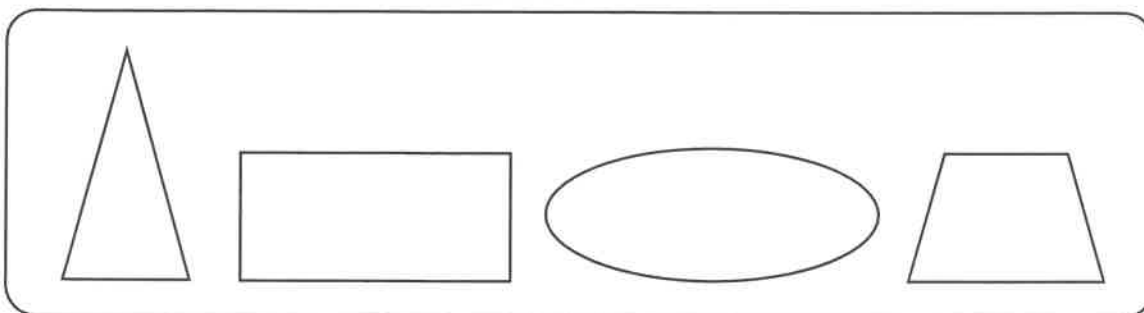
## Learning Reminders



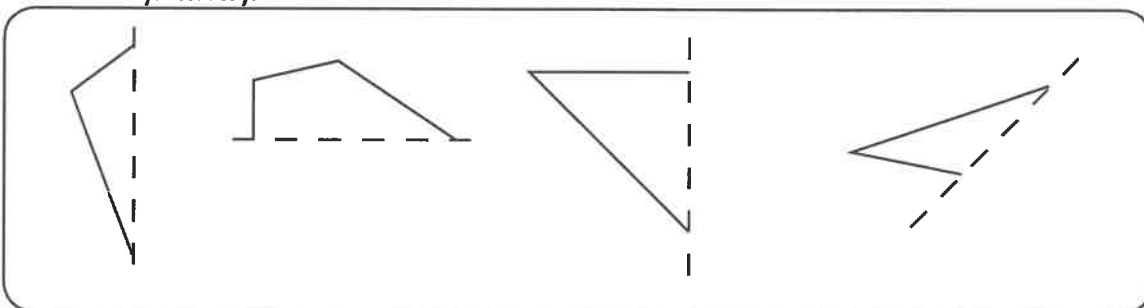
# Practice Sheet Mild

## Symmetrical shapes

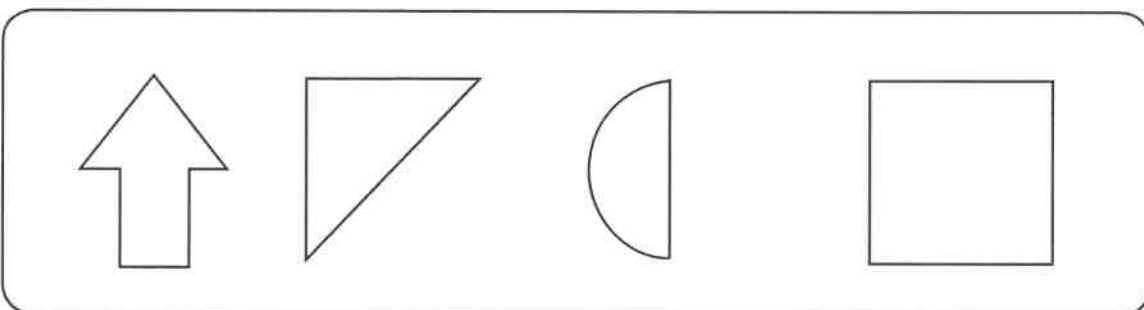
1. Draw all the lines of symmetry on these shapes.



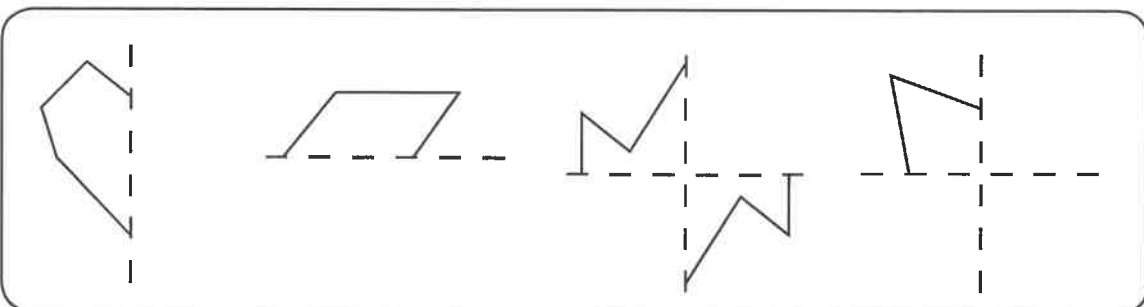
2. Complete these shapes to make them symmetrical across the dotted lines of symmetry.



3. Draw all the lines of symmetry on these shapes.

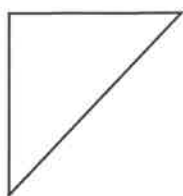
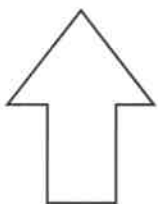


4. Complete these shapes to make them symmetrical.

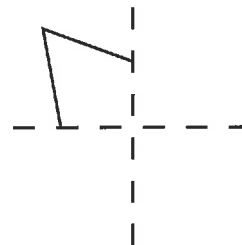
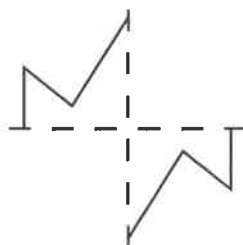
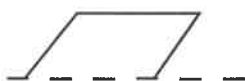


## Practice Sheet Hot Symmetrical shapes

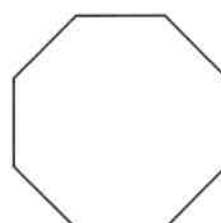
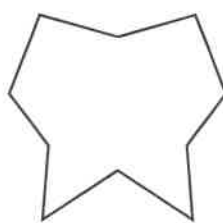
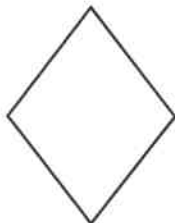
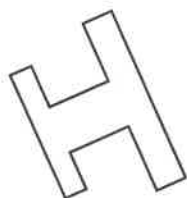
1. Draw all the lines of symmetry on these shapes.



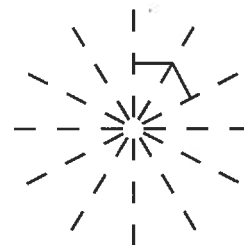
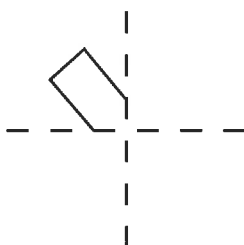
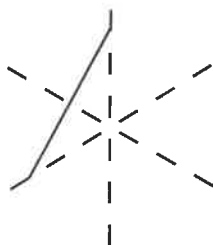
2. Complete these shapes to make them symmetrical across the dotted lines of symmetry.



3. Draw all the lines of symmetry on these shapes.

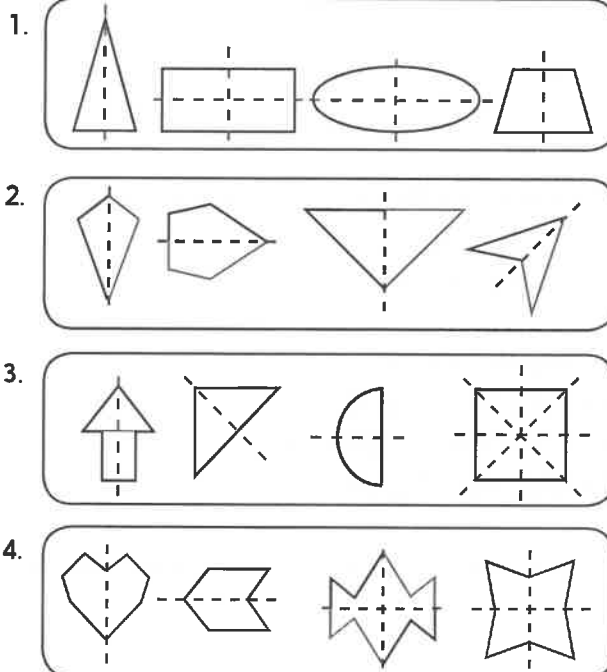


4. Complete these shapes to make them symmetrical.

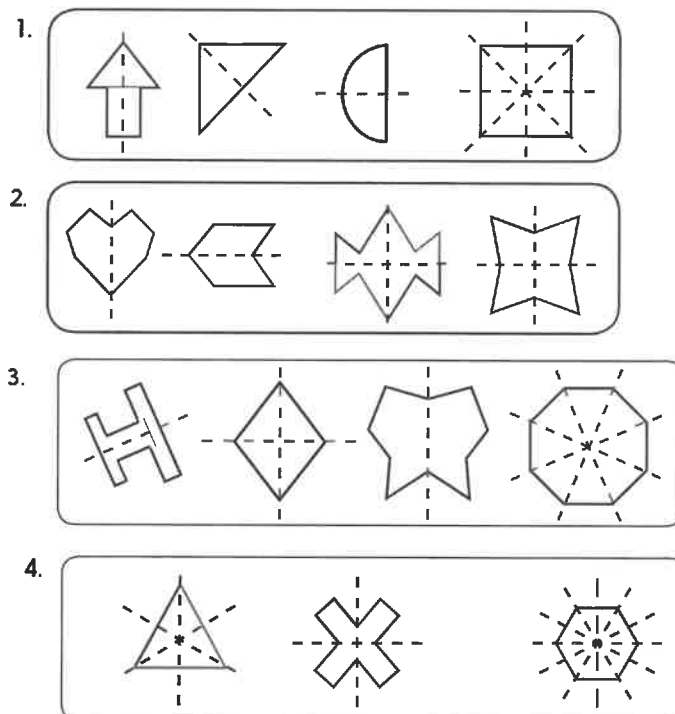


# Practice Sheets Answers

## Symmetrical shapes (mild)



## Symmetrical shapes (hot)





## A Bit Stuck? Symmetry shape sort

### You will need:

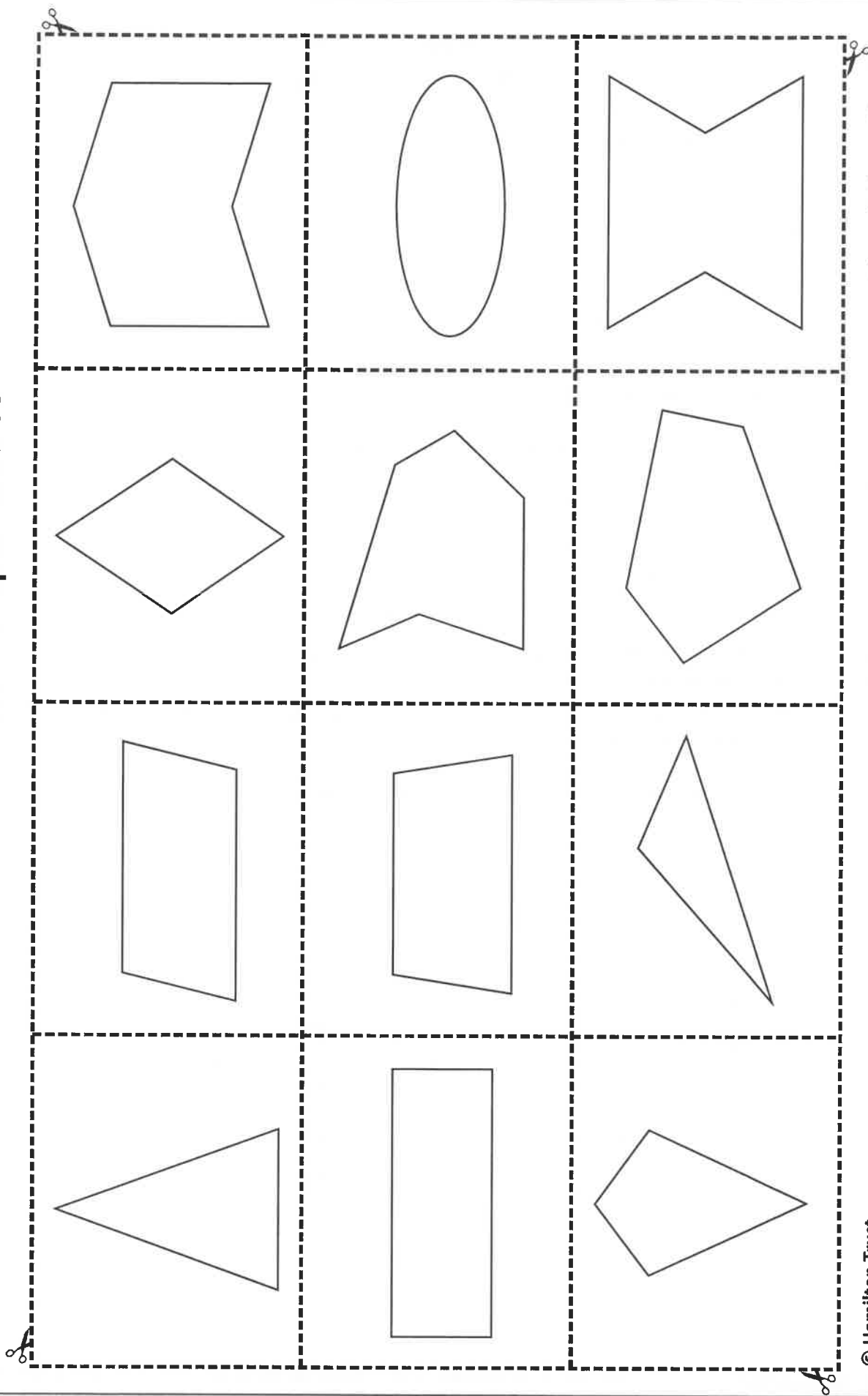
- Shapes for sorting (see resource)
- Mirror
- Pencil
- Paper

### What to do:

1. Draw lines of symmetry on the shapes where you can.
2. Use a mirror to check your ideas.
3. Sort the shapes into three sets:
  - those with one line of symmetry;
  - those with two lines of symmetry;
  - those with no lines of symmetry.
4. Draw at least one more shape of your own to add to each set.



# A Bit Stuck? Shapes resource



## Investigation Tremendous tiles

1. Look at the tiles below.



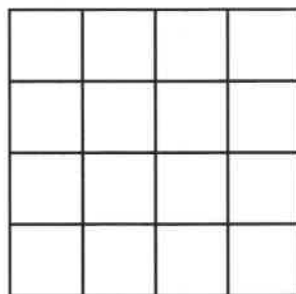
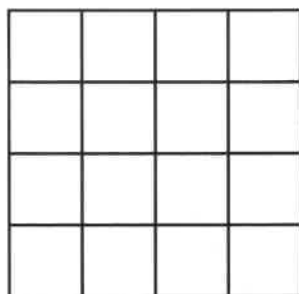
2. Pick your favourite and cut it out.
3. Create a pattern using your tile on a 4 x 4 square. Draw your tile pattern in each individual square.
4. Use it either as it is, or rotated through 90, 180 or 270 degrees, e.g.



5. Create a pattern on the large square with one line of symmetry, then a pattern with two lines of symmetry.

If you rotate your tile through 270 degrees, what do you notice about the result in relation to its original position?

How many patterns can you find with two lines of symmetry?



## 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 set of instructions

- Watch the reading of *Zoo* by Anthony Browne  
<https://www.youtube.com/watch?v=T07u0AaggVsg>
- 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 adverbials

- Use the *PowerPoint teaching adverbials* to understand how to use these. Or, if this is not possible, remind yourself using the *Revision Card*.
- Complete *Zoo Adverbials*. You could challenge yourself to write two new versions of each sentence. Can you change the emotion by the adverbials that you add?

### 3. Now for some writing

- Think about a day out for you. Talk to someone about a daytrip that you would REALLY like to have. Be as imaginative and fantastic as you want!
- Write about what you would do. Use adverbials in some sentences.

*Well done! Share your writing with a grown-up. Show them the adverbials that you have included in your writing.*

### Try the Fun-Time Extras

- Can you find some more stories by Anthony Browne?
- Can you find out some information about Anthony Browne? You could start here:  
<http://www.anthonybrownebooks.com/>

## Adverbials – Revision Card

### Adverbials

Adverbials tell us more about a verb.

Adverbials can be

a word,

a phrase,

or a clause.

unfortunately

in the wild

as they adapt to captivity

### Adverbials

Adverbials answer the questions...

Adverbials tell us  
more about a verb.

Where?

Tigers hunt in the wild.

When?

Tigers hunt at night.

How?

Tigers hunt with cunning.

**Adverbials can be placed before and after the main clause.**

*Lemurs forage.*

For much of the day, Lemurs forage in the wild.

With nimble fingers, lemurs forage for fruit and small insects.

Up in trees, Lemurs forage with others nearby.

When an adverbial appears in front of the sentence it is modifying...  
it is called a fronted adverbial.

Fronted adverbials are punctuated by a comma.

## Zoo Adverbials

Try **adding adverbials** to change the impact.

Try making the zoo seem a good or bad place to be.

Or make your reader impressed, scared, bored or sorry for the zoo animals.

1. The tiger paced.
2. The elephant chewed.
3. Some giraffes ambled.
4. The meerkat watched.
5. The rhinoceros stamped.
6. The penguins waddled.
7. A polar bear sniffed.
8. Two baboons fought.
9. The orangutan crouched.
10. A gorilla stared.

*Adverbials often start with a preposition.*

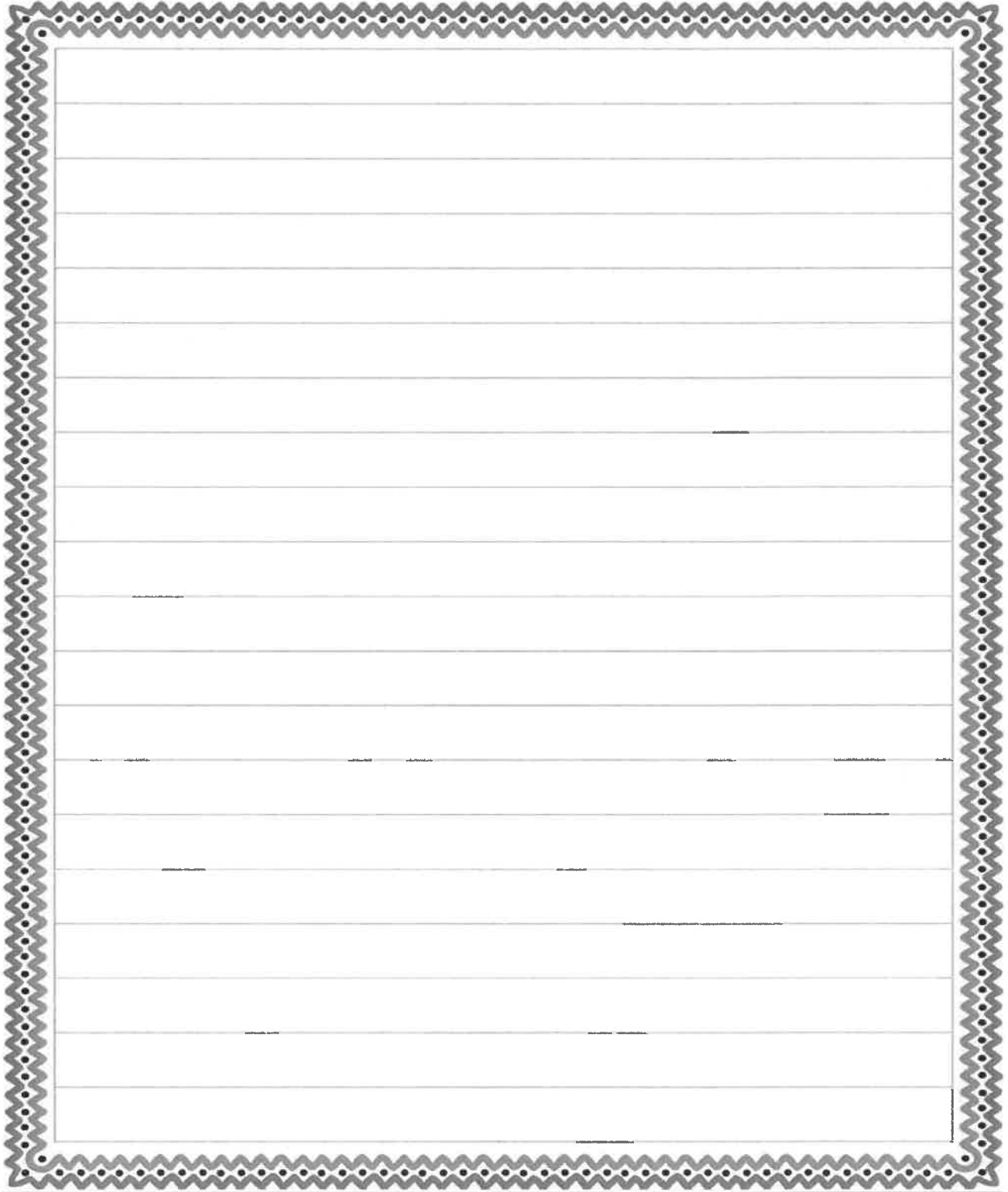
*Use some of these then see if you can think of different ones to use.*

### Prepositions

time	place	manner
before	above	in
after	below	with
while	inside	as
in	outside	like
on	to	
at	on	
until	from	
	by	
	across	
	under	

## My Day Out

*Write about a day out that you would REALLY like to have. Include sentences with adverbials.*

A large rectangular writing area with a decorative border. The border is a repeating pattern of small circles and dots. Inside the border, there are 20 horizontal lines for writing, spaced evenly. The writing area is currently blank.

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





## 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 sets of opinions

- Read *Zoo Opinion 1*.
- Which of the writer's points do you think is most powerful? Why?
- Read *Zoo Opinion 2*.
- Which of these two pieces of writing do you agree with most? Why?

### 2. Practise using adverbials

- Use the *Revision Card* to remind yourself about adverbials.
- Complete *Adverbials in Sentences*. Find and underline the adverbials.

### 3. Now for some writing

- Write a letter to a zoo-owner, asking them to treat the animals well.
- Explain why they should do this and how they can do this.
- Plan your letter on the *Skeleton Frame* and then write it out carefully.

*Well done! Share your writing with a grown-up. Show them the adverbials that you have used. You can check your answers to the Adverbials in Sentences at the end of this pack.*

### Try the Fun-Time Extra

- Can you research more about zoos? You could use these sites:

[www.bbc.co.uk/guides/ztkpn39#zs6c4wx](http://www.bbc.co.uk/guides/ztkpn39#zs6c4wx)

[www.nationalgeographic.org/encyclopedia/zoo/](http://www.nationalgeographic.org/encyclopedia/zoo/)

[www.batterseaparkzoo.co.uk](http://www.batterseaparkzoo.co.uk)

[www.zsl.org/kids-zsl](http://www.zsl.org/kids-zsl)

[www.chesterzoo.org/explore-the-zoo](http://www.chesterzoo.org/explore-the-zoo)

## Zoo Opinion 1



The problem with zoos is that lots of them soothe their feelings of guilt by telling themselves that they are really doing these animals a favour by contributing towards the conservation of the species. The reality, however, is very different. Many of these animals that are bred in captivity never get to experience their true identity. They never get to roam around freely, making relationships and acting in a natural way. They are told what to eat, when to sleep, what to play with (if anything!) and how to act. They will never be released as they wouldn't be able to survive for more than five minutes in the wild. So, the next time you see an animal in the zoo, please consider these points and **DON'T** be fooled by the signs telling you the zoo is keeping the animal contained for the better good because this is definitely not the case!

Some might say that zoos help the animal have a longer life BUT does longer necessarily mean BETTER? Ok, so the animal might have another few years on this planet, but you have to ask yourself: does it really want those extra years? Wouldn't it be better to put it out of its misery sooner? In the wild, animals live life to the full every day, and, whilst I accept that this may mean they are subject to an early death by predators or disease, this still has to be better than sitting in a tiny cage having humans shout at you and having cameras flash at you all day, every day, doesn't it?

## Zoo Opinion 2



Can everyone afford a trip to Africa or the Arctic? I don't think so. This is where zoos come into their own. Instead of having to pay thousands on flights and travel, the cost of the zoo is nothing AND you are at least guaranteed to see some animals. There have been stories where people have paid extraordinary amounts of money to go on safari and they haven't even seen a bird! What a waste of money and time! Isn't it better to have these animals in zoos around the county so they are accessible to everyone and not just the elite who can afford it?

If someone has never seen a tiger in real-life, why would they bother donating money to save the tigers in the wild? However, once they have seen the beauty and majestic qualities a tiger has, by visiting a zoo, then they will surely be much more likely to donate in the shop or when they get home. Therefore, that one tiger in the zoo has helped save thousands of others in their natural habitats.

Some endangered species in the wild find it almost impossible to find a mate as their species numbers are so small, making an already awful situation even worse. This is where zoos with a comprehensive conservation programme come into their own. Through these programmes, animals can be paired up with a suitable mate and they will go on to have strong babies that have a good chance of being released back into the wild. The animals remaining in the zoo lead a peaceful and contented life with a companion rather than having the gruelling struggle of trying to find a mate for their whole life.

## Revision Card - Adverbials

### Adverbials

Adverbials often open with a preposition.

*Some snakes can adapt to life in captivity.*

*They live in special heat-controlled tanks.*

*As pets, they require special food.*

You can look for prepositions to help you spot some adverbials.



#### time

before  
after  
while  
in  
on  
at  
until

#### place

above  
below  
inside  
outside  
to  
on  
from  
by  
across  
under

#### manner

in  
with  
as  
like

The preposition is part of the adverbial.

## Adverbials in sentences

- Identify the adverbials in each sentence.
- Add commas to fronted adverbials.
- Discuss the main purpose of the article.

1. *In the UK thousands of exotic animals are kept as pets.*
2. *Usually people keep exotic animals for interest or kudos.*
3. *Many species can be kept successfully in captivity.*
4. *Sadly studies have shown that other animals struggle away from their natural habitats.*
5. *Snakes, lemurs and crocodiles are just some of the exotic pets privately kept across the UK.*
6. *Often lemurs are challenging to keep in captivity.*
7. *In the wild they have constant stimulation from foraging and socialising.*
8. *Stressed or bored captive lemurs can become unhealthy after a while.*
9. *Crocodiles are aggressive and hostile towards humans.*
10. *With a powerful bite crocodiles make dangerous pets to have in a home.*
11. *To make them safer venomous snakes are defanged sometimes.*
12. *Few exotic animals can thrive in human homes.*

**HINT:** Look for the main clause and find the verb.

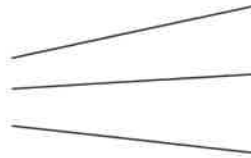
The adverbial will be modifying it.



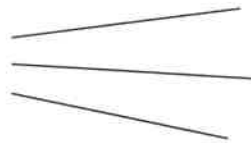
## Skeleton Frame

**Title:** \_\_\_\_\_  
**Introduction (What? Who? Where? Why?)**

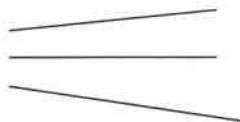
- **Point 1**



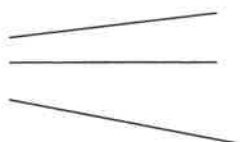
- **Point 2**



- **Point 3**




- **Point 4**



**Conclusion (Summarise what you have argued.)**

## Your Letter

A large rectangular area with a decorative border and horizontal lines for writing a letter. The border is a grey zigzag pattern with small black dots. The interior is white with horizontal lines. There are 20 horizontal lines in total, including the top and bottom lines of the border. The lines are evenly spaced and extend across the width of the rectangle.

A large rectangular area with a decorative border. The border is a repeating pattern of small circles and dots. Inside the border, there are 20 horizontal lines, creating 19 rows of space for writing. The lines are evenly spaced and extend across the width of the rectangle.



### Adverbials in Persuasive Writing: (answers)

1. In the UK, thousands of exotic animals are kept as pets.
2. Usually, people keep exotic animals for interest or kudos.
3. Many species can be kept successfully in captivity.
4. Sadly, studies have shown that other animals struggle away from their natural habitats.
5. Snakes, lemurs and crocodiles are just some of the exotic pets privately kept across the UK.
6. Often, lemurs are challenging to keep in captivity.
7. In the wild, they have constant stimulation from foraging and socialising.
8. Stressed or bored captive lemurs can become unhealthy after a while.
9. Crocodiles are aggressive and hostile towards humans.
10. With a powerful bite, crocodiles make dangerous pets to have in a home.
11. To make them safer, venomous snakes are defanged sometimes.
12. Few exotic animals can thrive in human homes.



## 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. Write some descriptions

- Look at the photo: *Fox in the Snow*.
- Write some descriptions of this photo. Try to make them as detailed as you can.
- Watch the video of foxes. Write a description of how they move.  
<https://www.youtube.com/watch?v=J4ToHu1MM9E>

### 2. Read a poem

- Read *First Fox*.
- Use the *Visual Dictionary* to help you to understand about the poem.
- Look carefully at the *Secret Strings*. Can you see the links that have been spotted?

Well done. Talk with a grown up about *Secret Strings*. They might like to read the *Adult Reference Notes*.

### 3. Find Secret Strings

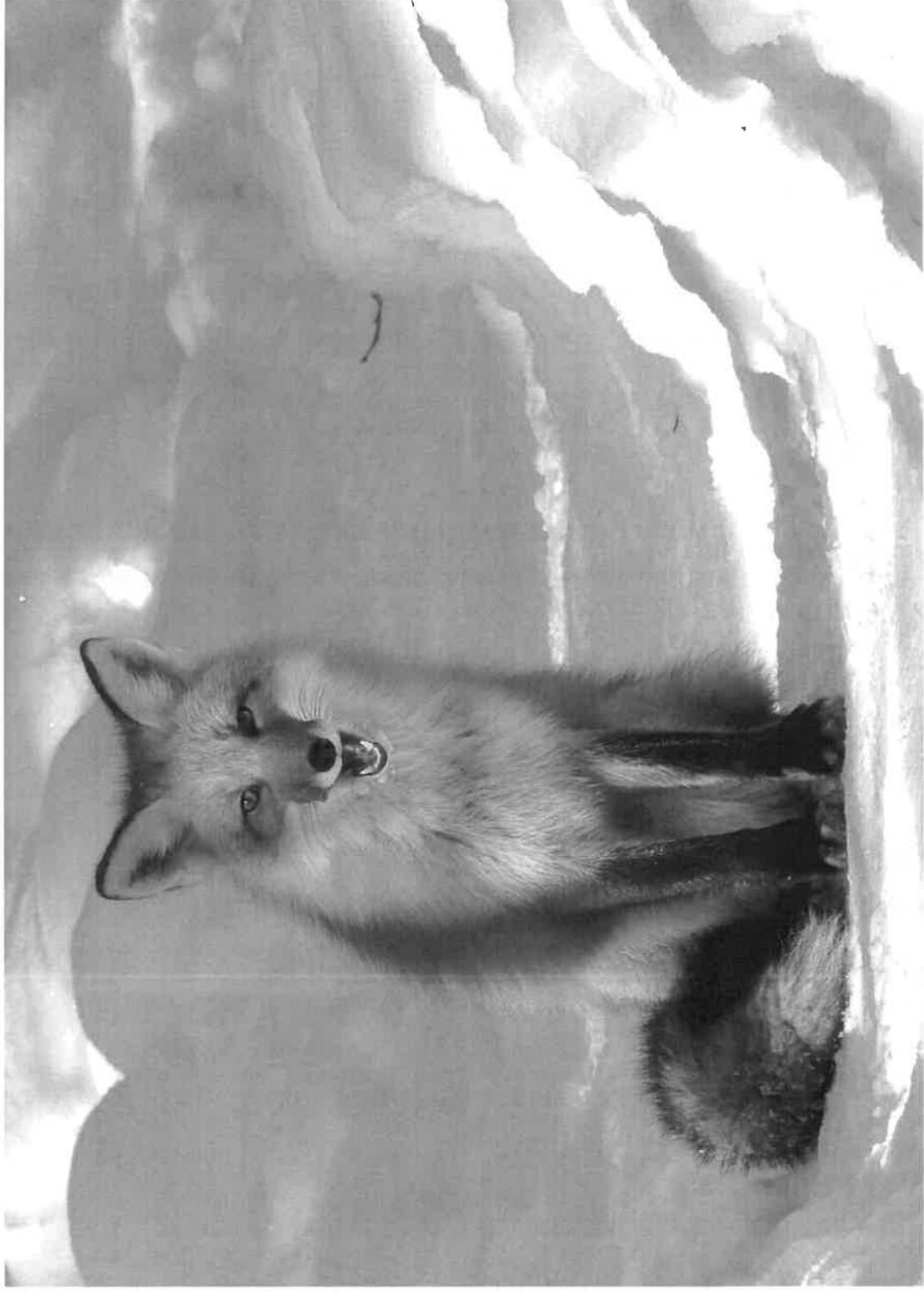
- Read the poem: *Fox*
- Highlight and underline the poem to show any secret strings that you can find. Anything that links one word or phrase with another.

*Well done! Share your secret strings with a grown-up.*

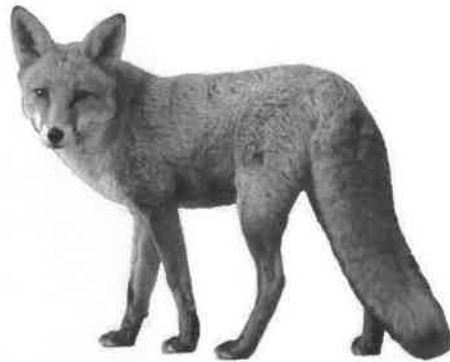
### Try the Fun-Time Extra

- Can you make an illustration for either of these poems?
- Can you write your own poem about foxes?

## **Fox in the snow**



## First Fox



A big fox stands in the spring grass,  
Glossy in the sun, chestnut bright,  
Plumb centre of the open meadow, a leaf  
From a picture book.

Forepaws delicately nervous,  
Thick brush on the grass  
He rakes the air for the scent  
Of the train rushing by,

My first fox,  
Wiped from my eye,  
In a moment of train-time.

Pamela Gillilan

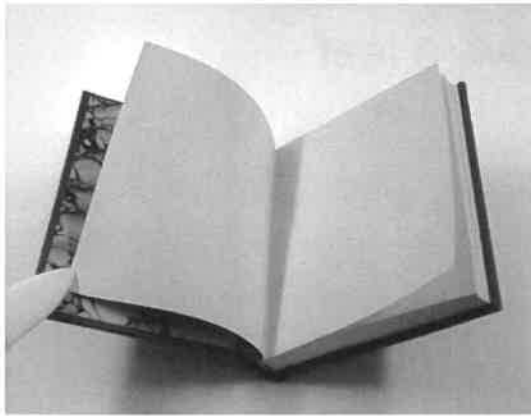
## Visual Dictionary



**Plumb line**



**Chestnut**



**Leaf of a book**



**Brush**



**Rake**



**Meadow**

## Secret Strings

A secret string is anything that links one word or phrase to another.

A big fox stands in the spring grass,  
Glossy in the sun, chestnut bright,  
Plumb centre of the open meadow, a leaf ??page??  
From a picture book.

- Alliteration – x and s making similar sounds
- Stands and grass echo one another because of the similar vowel sounds
- Nut and bright echo one another because they have the t sound at the end
- Open and book are linked words – the meadow is open like a book
- Why hasn't the poet used the word page. Is it because leaf is also to do with nature?
- Chestnut bright is a shortened simile – as bright as a chestnut...

## 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.

**A secret string is anything that links one word or phrase to another.**

They can include:

- Words sounding like 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 First Fox example, these Secret Strings have been marked:

- Assonance
- Alliteration
- Echoing words
- Precise language
- Simile/Metaphor



## Fox

After dark  
when the cars park  
and the streets are quiet  
Fox comes  
loping calmly over the wall.

He strolls  
along the pavement  
and  
across the road  
with his long nose,  
sharp ears  
and his feathery brush of a tail,  
flows like water through the shadows and hard  
spaces.

He goes alone.  
This is his place  
these trails of smells,  
the bins and bags that are his pickings  
the yards and parks,  
back alleys and the hollows under cars.  
If we pass by he turns and with one look  
reminds us  
that we've only borrowed it.

by Kathy Henderson





## 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. Chose a view and write about it

- Look carefully at *Sea Views*.
- Which of these seas would you most like to watch? Why?
- Write a careful description of what you would see, smell and feel.

### 2. Read and think about a poem

- Read *Doing Nothing Much*.
- Read and think about the *Poetry Questions*. Write some of your answers in clear sentences.

### 3. Compare two poems

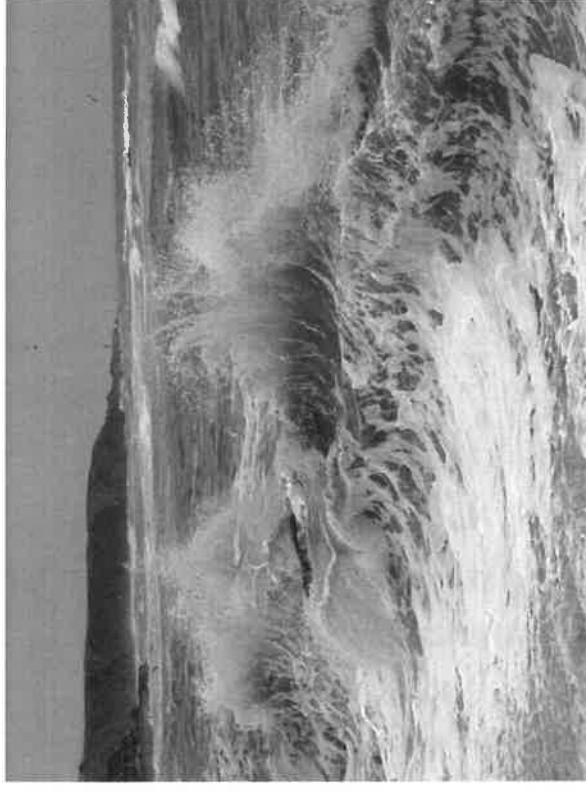
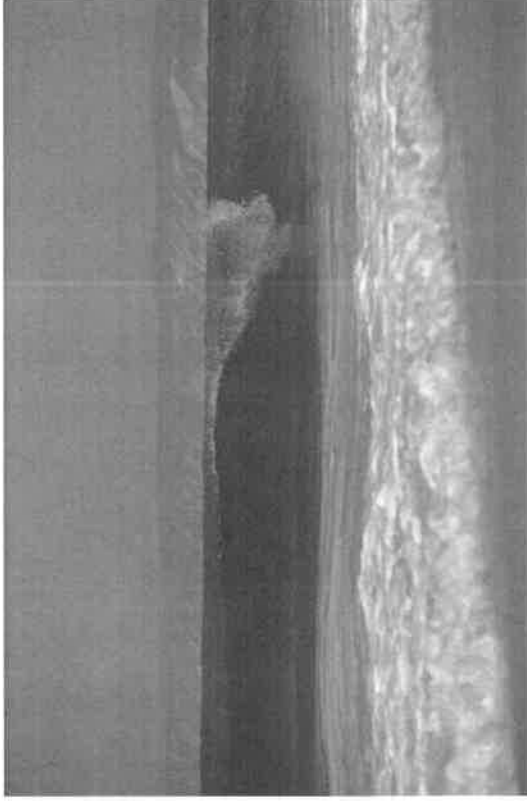
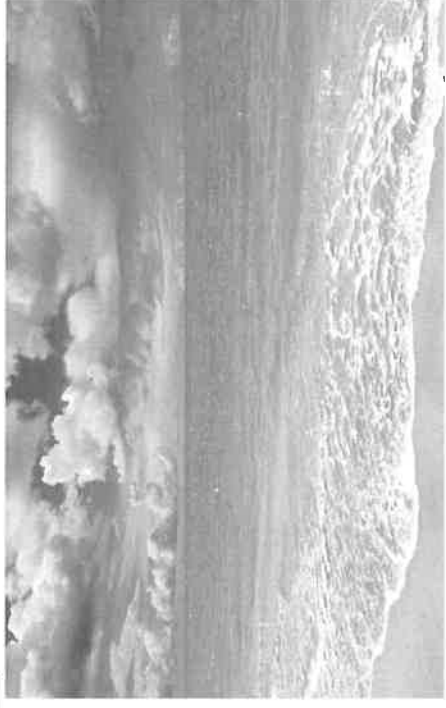
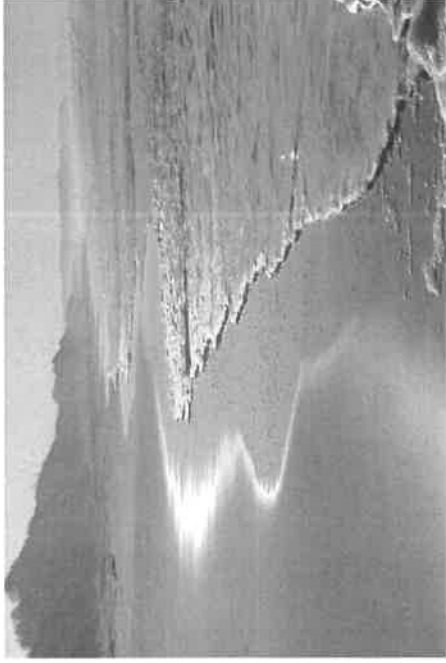
- Read *Maggie and Millie and Molly and May*. Then read *Black Pebble*.
- Answer the *Seaside Poem Questions* to help you to understand the poems.
- Fill in the *Compare Frame*, to show what is similar about the two poems.

Well done. Read your Compare Frame to a grown-up. Do they agree with the thing that you said was most similar about the two poems?

### Try the Fun-Time Extras

- Pick your favourite of the three poems:
  - Can you make an illustration for it?
  - Can you learn all or some of it off-by-heart?
  - Can you practise reading it aloud until you are really confident?
  - Can you record and share your reading of the poem?
- Can you write your own poem about the sea?

## Sea Views



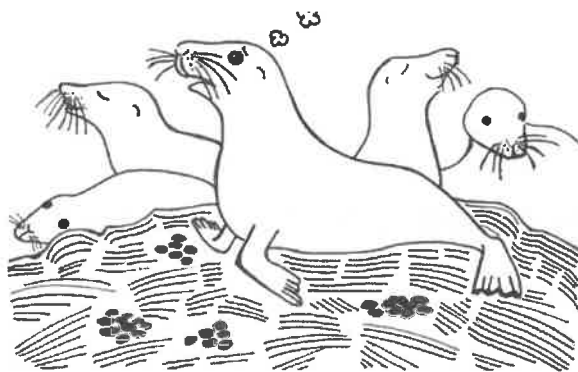
## Doing Nothing Much

I could potter for hours on a lonely beach  
Picking pebbles to roll in my hand,  
Wondering where will the next wave reach,  
Writing my name in the sand

Near the tumbling weir, where the hawthorn's pink.  
I could sit for hours in a trance  
Watching the water stream to the brink  
And the white foam pound and dance.

Or high on a headland find me,  
While a seagull wheels and dips,  
Gazing for hours out to sea  
At islands and smudges of ships.

by Eric Finney



## **Poetry Questions**

**What do you like about the poem? Is there anything you dislike? What does it remind you of? How does it make you feel?**

**What patterns can you find? Is there any rhyme, alliteration or assonance? Is anything repeated?**

**What interesting words or phrases can you find? What do they mean? Are there any metaphors or similes? Are there any vivid descriptions?**

## Maggie and Milly and Molly and May

maggie and milly and molly and may  
went down to the beach (to play one day)

and maggie discovered a shell that sang  
so sweetly she couldn't remember her troubles, and

milly befriended a stranded star  
whose rays five languid fingers were;

and molly was chased by a horrible thing  
which raced sideways while blowing bubbles: and

may came home with a smooth round stone  
as small as a world and as large as alone.

For whatever we lose (like a you or a me)  
it's always ourselves we find in the sea

*by E.E. Cummings*



# The Black Pebble

There went three children down to the shore  
Down to the shore and back;  
There was skipping Susan and bright-eyed Sam  
And little scowling Jack

Susan found a white cockle shell,  
The prettiest ever seen,  
And Sam picked up a piece of glass  
Rounded and smooth and green.

But Jack found only a plain black pebble  
That lay by the rolling sea,  
And that was all that ever he found;  
So back they went all three.

The cockle shell they put on the table,  
The green glass on the shelf,  
But the little pebble that Jack had found  
He kept it for himself.

*by James Reeves*





## **Seaside Poem Questions**

Who visits the seaside in the poem?

What do they find at the seaside?

What do they do when they come home?

Has going to the seaside changed them?

## Compare Frame

There are several ways in which ....

and .... could be said to be similar.

The first way that they are alike is that they are both ...

Another similarity is that they ....

A further feature they have in common is ....

Finally, they both ....

I think the most significant similarity is ...

because...

*from Speaking Frames by Sue Palmer*

## 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. Write descriptions of a thunderstorm

- Look at the picture: *Thunderstorm*
- Can you imagine being in a storm like that? Write some descriptions of what you would see, here and feel.

### 2. Read a poem

- Read *Thunder and Lightning*
- Underline the verbs that have been used in the poem. Can you highlight any other powerful language that has been used in the poem?
- Practise reading the poem out loud until you read with real expression.

### 3. Answer questions about a poem

- Read *That Stormy Night*.
- Answer *Stormy Night Questions*. Write your answers in clear sentences.
- Share your answers with a grown-up. You can check some of them at the end of this pack.

### 4. Make a choice.

- Read *Where Would You Be?*
- Decide where you would want to be – inside or out in the wild. Write 3-5 sentences to explain your choice.

### Try the Fun-Time Extras

- Pick your favourite of the three poems:
  - Can you make an illustration for it?
  - Can you learn all or some of it off-by-heart?
  - Can you record and share your reading of the poem?
- Can you write your own poem about a storm?

## Thunderstorm



## Thunder and Lightning

Blood punches through every vein  
As lightning strips the windowpane

Under its flashing whip, a white  
Village leaps to light.

On tubs of thunder, fists of rain  
Slog it out of sight again.

Blood punches the heart with fright  
As rain belts the village night.

*by James Kirkup*

## That Stormy Night



That stormy night  
when the wind moaned like a wolf  
and bent the trees, and shook the house  
I wondered if it could blow the stars away.

What then – if their glittering dust  
lay among the fallen leaves the next day  
crystals and splinters in the morning light?  
I'd sweep them up and put them in a box

and bring them home to you. You'd say  
*Nonsense. What you see up there  
is light that's millions of years away  
you know that, don't you?*

Yes. I know. But still  
I'd shake my box of stardust  
hold it tight  
knowing the wind had blown the stars away

that stormy night

by Berlie Doherty

## **Stormy Night - Questions**

1. What simile does the poet use for the wind's sound?
2. What two effects does the wind have?
3. What does the narrator wonder?
4. What adjective is used to describe star dust?
5. Who do you think the narrator takes the box to?
6. Why don't you think that they believe there is stardust in the box?
7. What is your favourite phrase in this poem? Why?
8. What is your opinion of this poem?

## Where would you be?



Where would you be on a night like this  
With the wind so dark and howling?  
Close to the light  
Wrapped warm and tight  
Or there where the cats are prowling?

Where would you wish you on such a night  
When the twisting trees are tossed?  
Safe in a chair  
In the lamp-lit air  
Or out where the moon is lost?

Where would you be when the white waves roar  
On the tumbling storm-torn sea?  
Tucked inside  
Where it's calm and dry  
Or searching for stars in the furious sky  
Whipped by the whine of the gale's wild cry  
Out in the night with me?

by Karla Kuskin



## Thunder and Lightning - answers

Blood punches through every vein  
As lightning strips the windowpane

Under its flashing whip, a white  
Village leaps to light.

On tubs of thunder, fists of rain  
Slog it out of sight again.

Blood punches the heart with fright  
As rain belts the village night.

Verbs underlined  
Powerful language highlighted

## Stormy Night - Answers

1. What simile does the poet use for the wind's sound?

The simile used is 'moaned like a wolf'.

2. What two effects does the wind have?

The wind bends the trees and shakes the houses.

3. What does the narrator wonder?

The narrator wonders whether the wind could blow the stars away.

4. What adjective is used to describe star dust?

The adjective used is the word, 'glittering'.

