

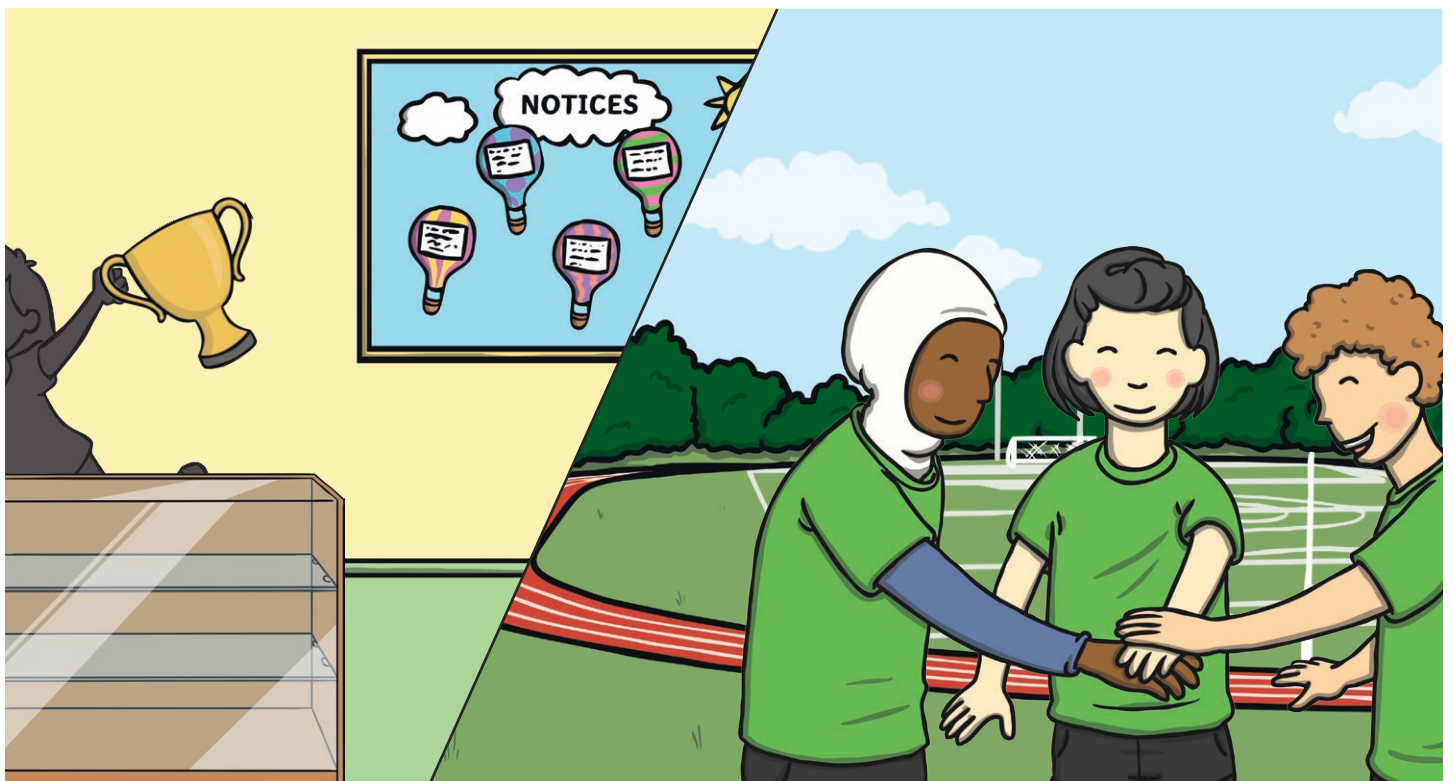
Longthorne Primary School Sports Day Trophy Thief

The pupils of Longthorne Primary School always look forward to Sports Day. They love being out of the classroom and racing each other in their school teams. If their team wins, they are presented with a super Longthorne Primary Sports Day trophy!

The parents are gathering on the hill to watch; the teachers are all looking a little frazzled. The children are raring to go!

But wait! There has been a disaster! Mrs Bertram, the headteacher, has gone to the cupboard where the trophy is kept and it has gone!

As Chief Inspector, it is your job to take down the details of all the suspects who were seen near the trophy cupboard just before the big event, and solve the five clues, to work out who is the Sports Day trophy thief!



Name	Male or Female	Year Group	Team Colour	Type of water bottle	Shoe size
Lydia	F	1	blue	metal	8
Brett	M	2	blue	plastic	8
Suzie	F	1	blue	plastic	4
Tilly	F	3	red	metal	5
Anas	M	1	green	plastic	5
Piotr	M	3	yellow	metal	10
Sadie	F	3	blue	metal	8
Marta	F	3	yellow	plastic	9
Ben	M	3	green	plastic	10
Usman	M	1	blue	metal	4
Lan	F	3	red	plastic	10
Harry	M	2	green	metal	8
Freya	F	3	red	metal	4
Mollie	F	3	blue	metal	9
Shi	M	2	blue	metal	8
Frederick	M	3	green	plastic	10
Ross	M	1	green	plastic	5
Nancy	F	3	red	metal	9
Zachary	M	2	yellow	metal	8
Meeta	F	2	blue	plastic	9

Clue 1: Which Material?

A water bottle was dropped by the thief near the trophy cupboard.

Here are some different types of sports balls. Their weight is given in grams.

Compare the weight of the different balls, and use $<$ or $>$ in the boxes below, to show which of the balls is heavier. If there are more $<$ signs, then the water bottle was made of metal.



450g



360g



156g



624g



163g



46g

1.  
2.  
3.  
4.  

5.  
6.  
7.  

Answer to Clue 1:

Clue 2: Take It Away

Work out the missing numbers in each calculation. Then, find the numbers in the key below and rearrange them to make a sentence.

1. $35 - \square = 22$

4. $81 - \square = 75$

2. $100 - \square = 20$

5. $49 - \square = 38$

3. $71 - \square = 66$

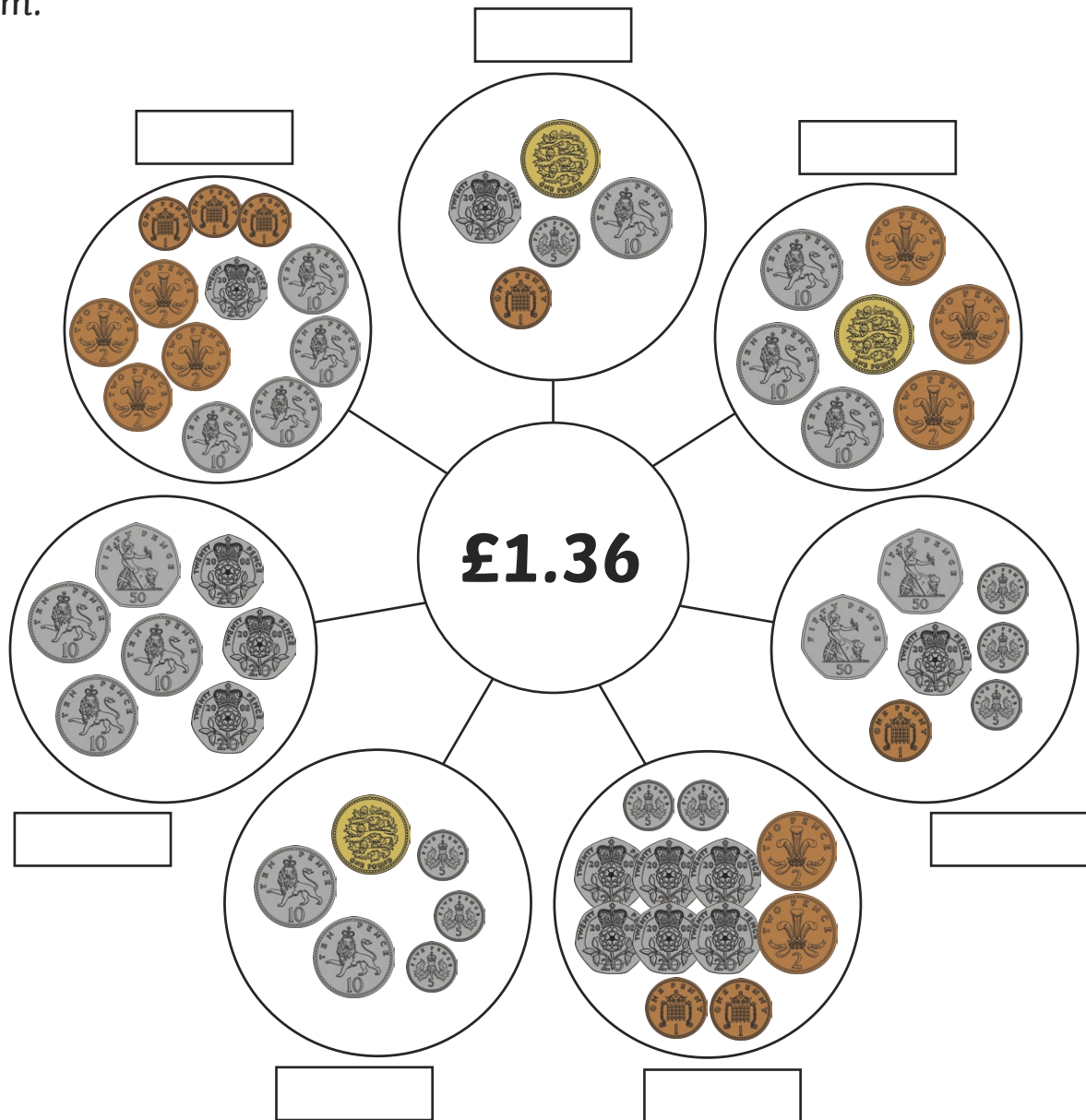
4 male	6 trophy	9 shoe	11 was
80 thief	70 sports	13 the	5 female

Answer to Clue 2:

Clue 3: Add the Coins

Find out how many of these groups of coins add up to £1.36.

Then, use the table at the bottom to see which year group the trophy thief is from.



	Tick	Year
I found two ways to make £1.36		1
I found three ways to make £1.36		2
I found four ways to make £1.36		3

Answer to Clue 3:

Clue 4: The Right Direction

A footprint was discovered beside the trophy cupboard!

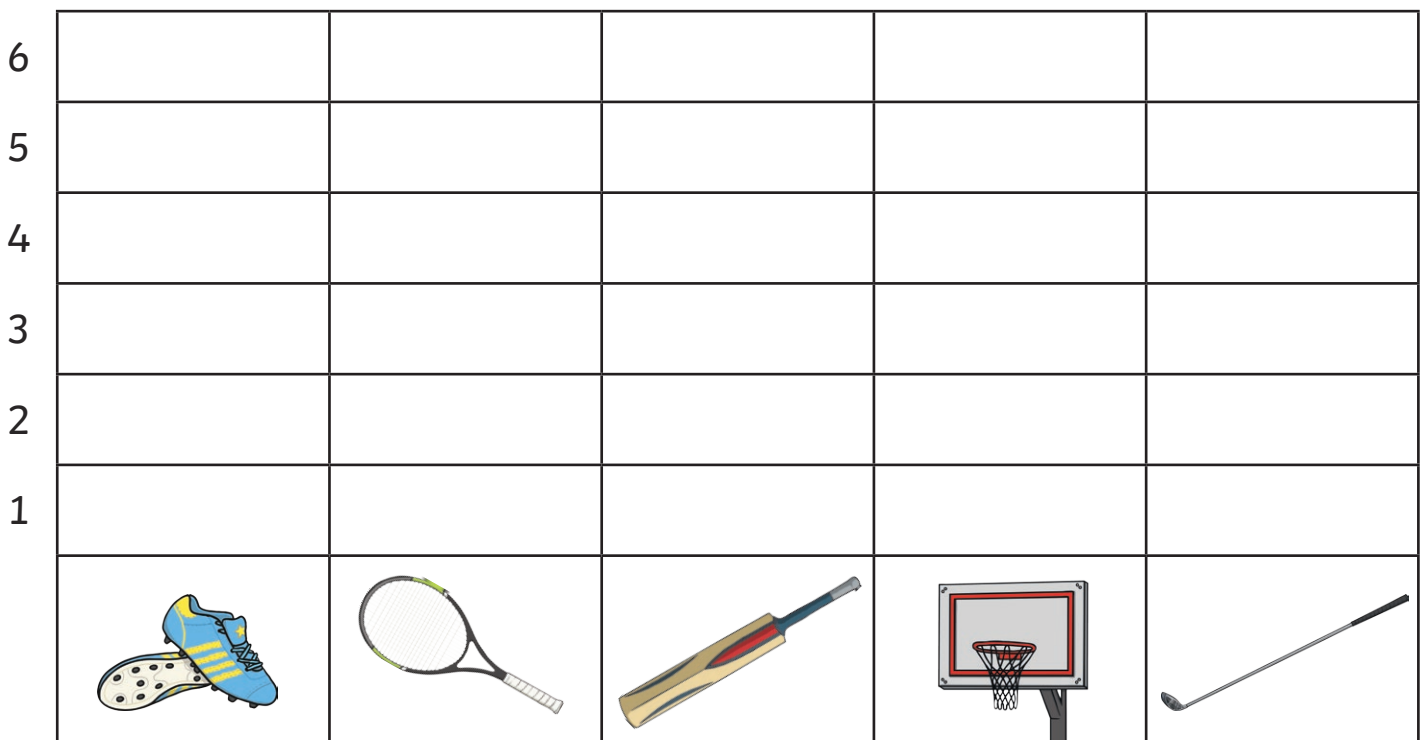
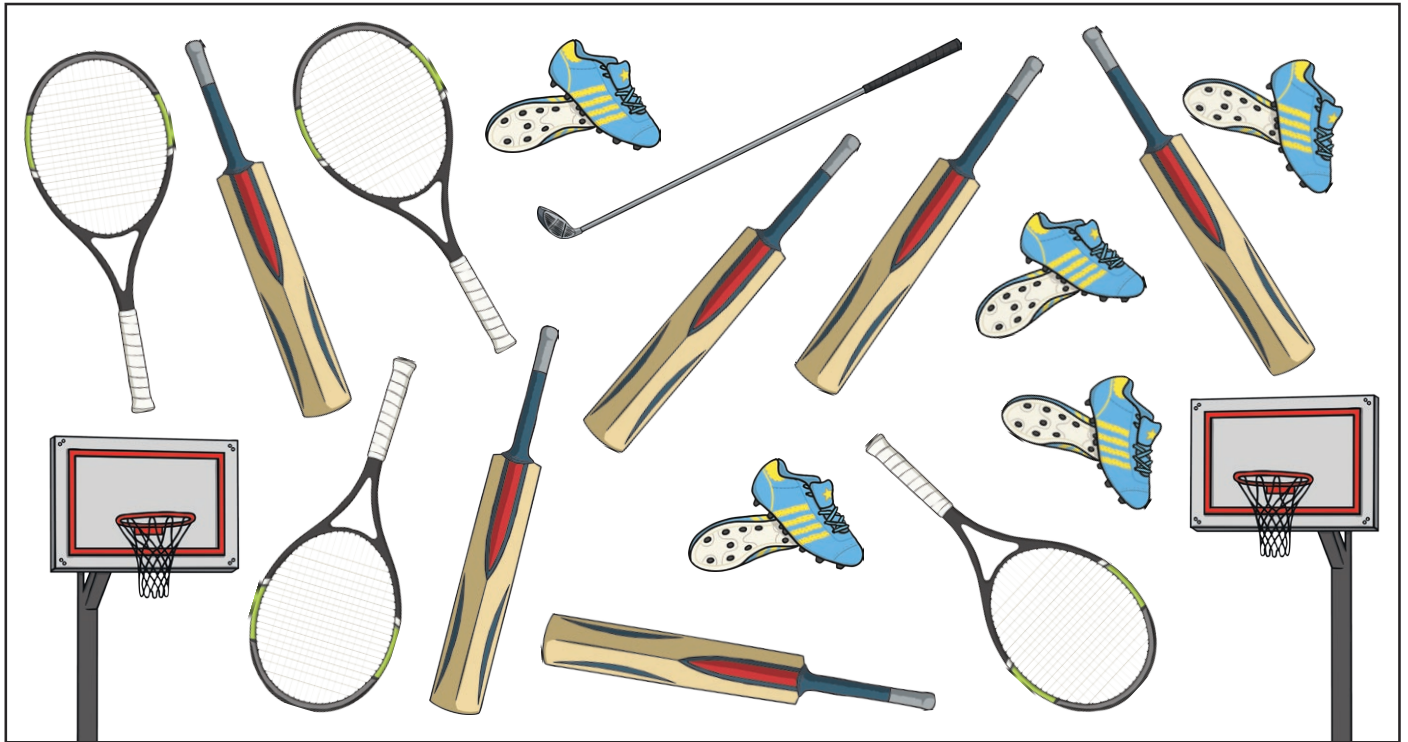
Use the instructions below to solve clue number 4. The instructions will take you to the square which will tell you what size shoes the trophy thief had.

	 Size 4					
				 Size 5		
						 Size 8
		 Size 10				
 X						 Size 9

1. Start at X.
2. Move 2 squares forward.
Turn right.
3. Move 1 square forward.
Turn left.
4. Move 2 squares forward.
Turn right.
5. Move 2 squares forward.
Turn right.
6. Move 1 square forward.
Turn left.
7. Move 1 square forward.
Turn right.
8. Move 3 squares forward.
Turn left.
9. Move 2 squares forward.
10. You have reached the answer!
11. The shoe size of the thief is size _____.

Clue 5: Sort It Out

Count the sports equipment and complete the bar graph. Then, answer the questions on the next page.



Clue 5: Sort It Out

Find the answers in the key, then rearrange the words to make a sentence which tells you which team the thief played for.

1. Look at the equipment which appears the most. How many are there?

2. Look at the equipment which appears the least. How many are there?

3. How many tennis rackets and pairs of football boots are there altogether?

4. What is the difference between the number of cricket bats and basketball hoops?

5. How many more tennis rackets are there than golf clubs?

6. How many pieces of equipment are there altogether?

9 played	5 red	3 thief	1 the
11 size	6 team	12 green	10 shoe
17 yellow	19 lost	4 for	18 blue

Answer to Clue 5:

Have you solved the mystery of the trophy thief?

It is _____!

Clue 1: Answers

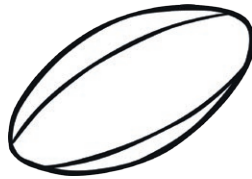
A water bottle was dropped by the thief near the trophy cupboard.

Here are some different types of sports balls. Their weight is given in grams.

Compare the weight of the different balls, and use $<$ or $>$ in the boxes below, to show which of the balls is heavier. If there are more $<$ signs, then the water bottle was made of metal.



450g



360g



156g



624g



163g



46g

1.  $>$ 
2.  $<$ 
3.  $<$ 
4.  $>$ 

5.  $<$ 
6.  $>$ 
7.  $<$ 

Answer to Clue 1:

There are more $<$ signs. The water bottle was metal.

Clue 2: Answers

Work out the missing numbers in each calculation. Then, find the numbers in the key below and rearrange them to make a sentence.

1. $35 - \boxed{13} = 22$

4. $81 - \boxed{6} = 75$

2. $100 - \boxed{80} = 20$

5. $49 - \boxed{11} = 38$

3. $71 - \boxed{5} = 66$

4 male	6 trophy	9 shoe	11 was
80 thief	70 sports	13 the	5 female

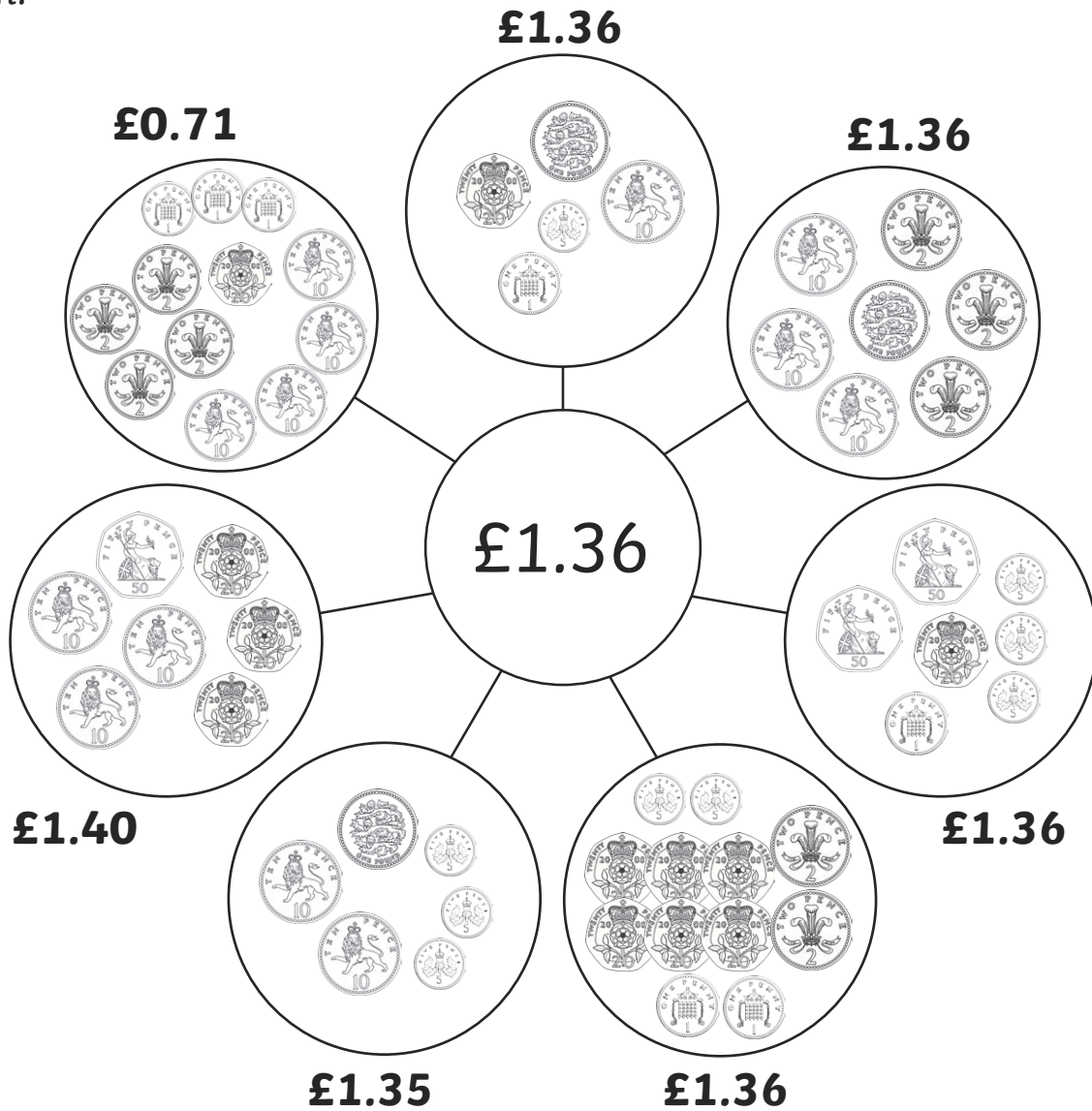
Answer to Clue 2:

The trophy thief was female.

Clue 3: Answers

Find out how many of these groups of coins add up to £1.36.

Then, use the table at the bottom to see which year group the trophy thief is from.



	Tick	Year
I found two ways to make £1.36		1
I found three ways to make £1.36		2
I found four ways to make £1.36	✓	3

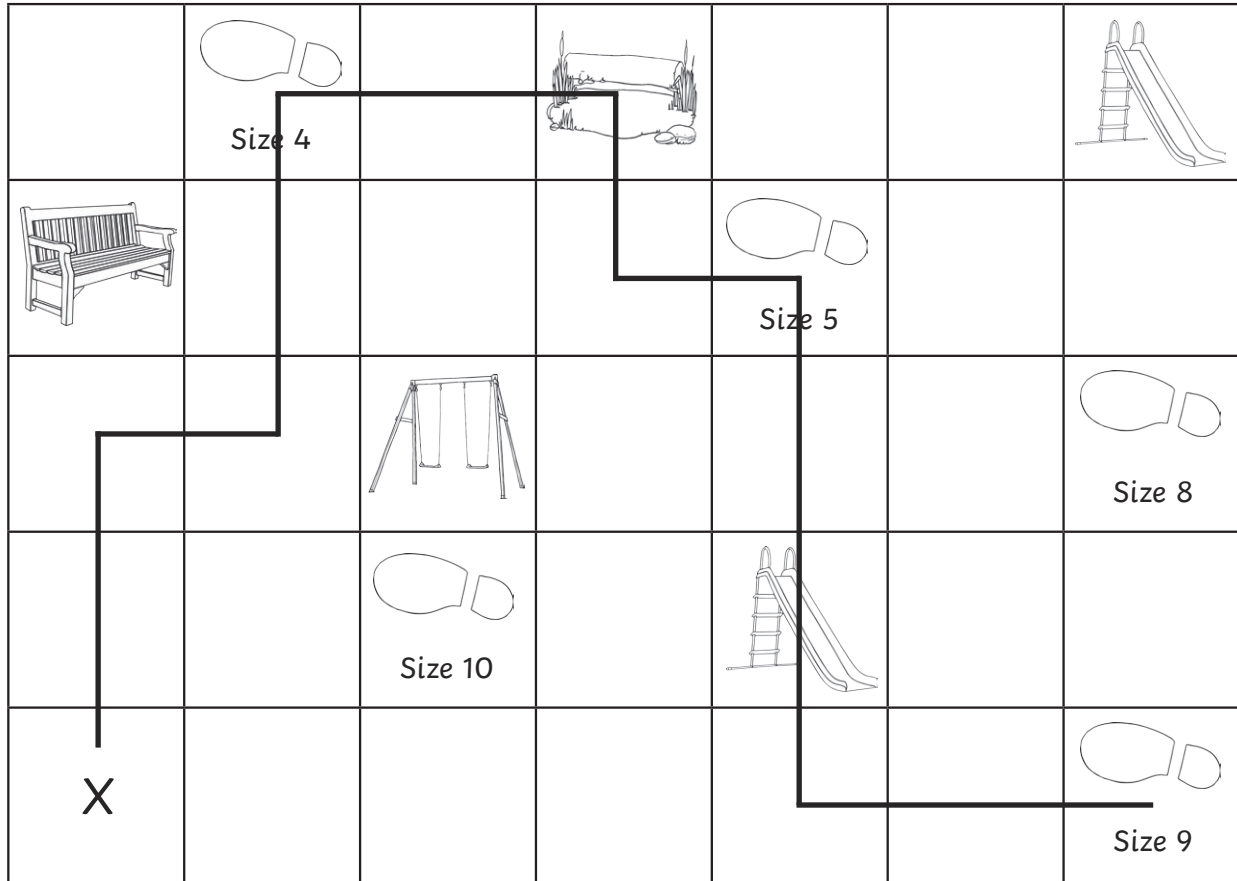
Answer to Clue 3:

The thief is from year 3.

Clue 4: Answers

A footprint was discovered beside the trophy cupboard!

Use the instructions below to solve clue number 4. The instructions will take you to the square which will tell you what size shoes the trophy thief had.

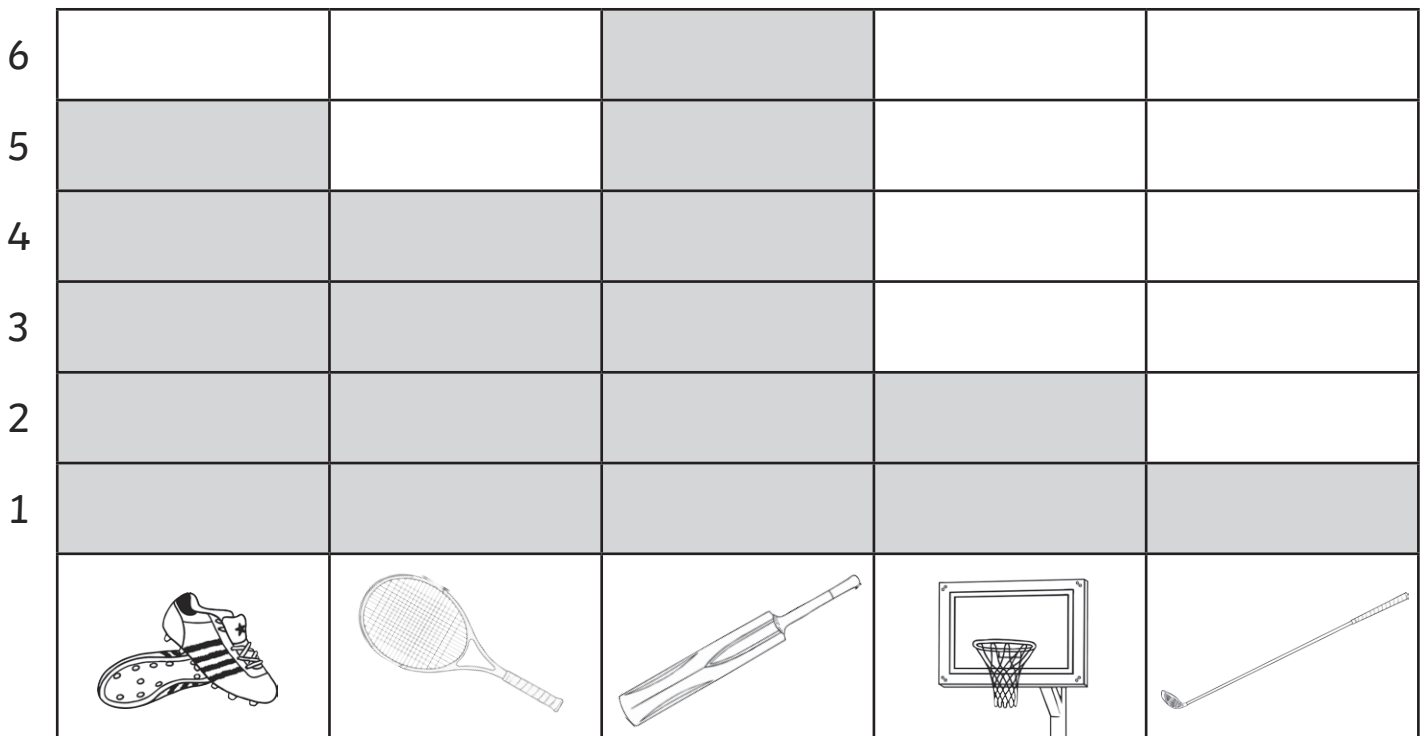
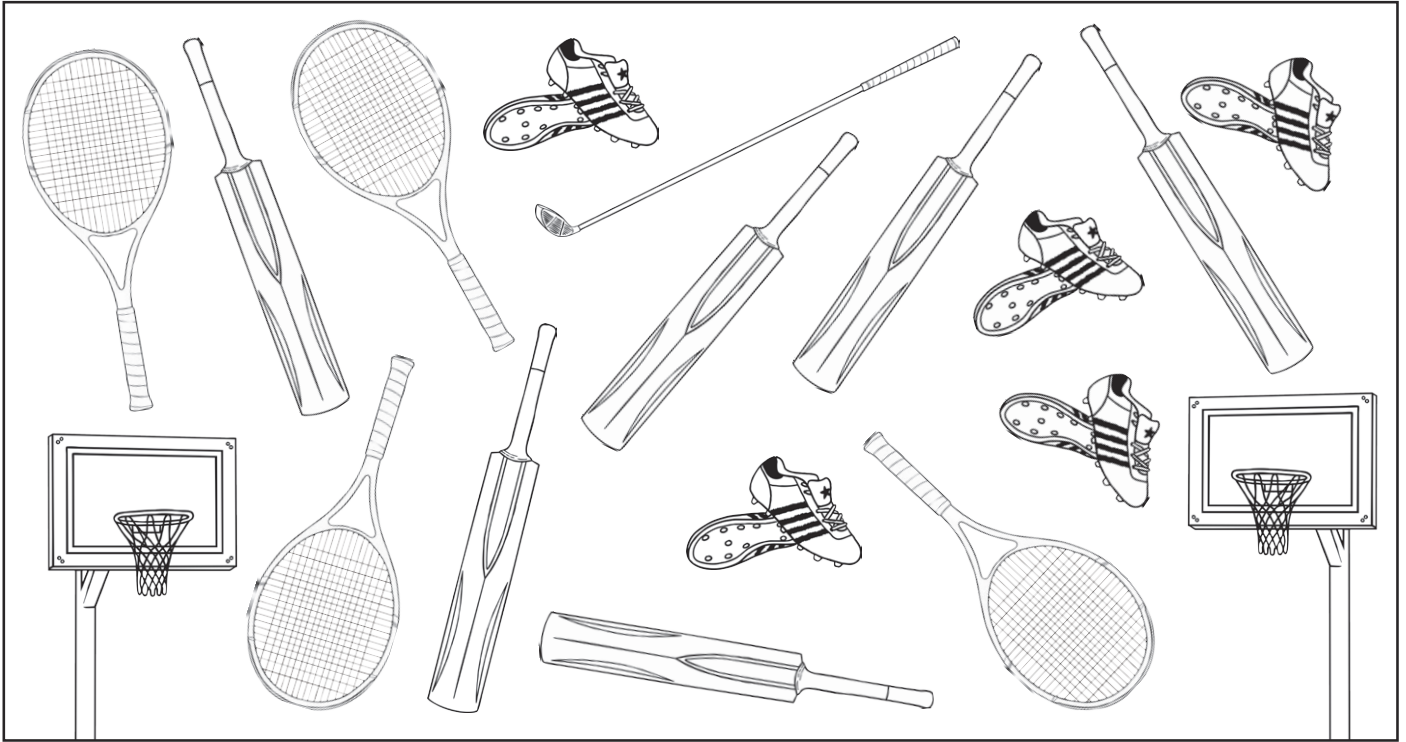


1. Start at X.
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Turn right.
3. Move 1 square forward.
Turn left.
4. Move 2 squares forward.
Turn right.
5. Move 2 squares forward.
Turn right.
6. Move 1 square forward.
Turn left.
7. Move 1 square forward.
Turn right.
8. Move 3 squares forward.
Turn left.
9. Move 2 squares forward.
10. You have reached the answer!
11. The shoe size of the thief is **size 9**.

Clue 5: Answers

Count the sports equipment and complete the bar graph. Then, answer the questions on the next page.

Find the answers in the key, then rearrange the words to make a sentence which tells you which team the thief played for.



Clue 5: Answers

Find the answers in the key, then rearrange the words to make a sentence which tells you which team the thief played for.

1. Look at the equipment which appears the most. How many are there?
6
2. Look at the equipment which appears the least. How many are there?
1
3. How many tennis rackets and pairs of football boots are there altogether?
9
4. What is the difference between the number of cricket bats and basketball hoops?
4
5. How many more tennis rackets are there than golf clubs?
3
6. How many pieces of equipment are there altogether?
18

9 played	5 red	3 thief	1 the
11 size	6 team	12 green	10 shoe
17 yellow	19 lost	4 for	18 blue

Answer to Clue 5:

The thief played for the blue team.

Have you solved the mystery of the trophy thief?

It is **Mollie**!