# The Back to School Mystery of the Missing Pencil Cases Maths Game

The pupils at St. Miranda's Infant School are excited to be back after the summer holidays. They have missed their friends and are looking forward to catching up with each other again, wearing clean PE kits and shiny shoes, and using their wonderful new pencil cases for the start of the new school year!

However, disaster has struck! During lunchtime, a cheeky person has sneaked into school and taken everyone's new pencil cases! Lydia's fluffy green case with a monster face has gone; Waqas' Star Wars pencil tin has vanished and Harry's emoji pencil tin is nowhere to be seen!

As you can imagine, everyone is very upset!

Your task is to solve the clues and work out the mystery of the missing pencil cases.







Name	M/F	Hair Colour	Mode of Transport	Type of Fruit Snack	Favourite Football Team
Narinder	М	dark	walks	orange	Manchester United
Mario	М	light	car	apple	none
Leah	F	light	car	strawberries	Liverpool
Klaudia	F	light	car	apple	Manchester United
Jacob	М	dark	walks	orange	Chelsea
Isaac	М	light	car	cherries	Liverpool
Наі	М	dark	car	cherries	Chelsea
Gurvinder	F	dark	car	orange	Aston Villa
Frankie	М	light	walks	cherries	Manchester United
Emil	М	light	car	apple	Liverpool
Dilek	F	light	walks	orange	none
Carter	М	dark	car	cherries	Liverpool
Bana	F	light	walks	apple	Manchester United
Amelia	F	light	walks	orange	Manchester United
Olivia	F	light	car	strawberries	Liverpool
Preet	М	dark	car	strawberries	Chelsea
Ruby	F	light	car	cherries	Liverpool
Sebastian	М	light	car	strawberries	Chelsea
Tomas	М	dark	car	apple	Manchester United
Usman	М	dark	walks	cherries	Liverpool
Violet	F	light	car	apple	Liverpool





#### Clue 1



## **Missing Numbers**

Fill in the missing numbers and colour the numbers you used in the table below. Put the words into a sentence to solve the first clue.

20	12	0	9	4
walks	pencil	under	thief	in
13	2	8	11	10
case	male	goes	car	female
5	6	3	7	15
to	the	school	found	α

Answer to clue 1: \_\_\_\_\_

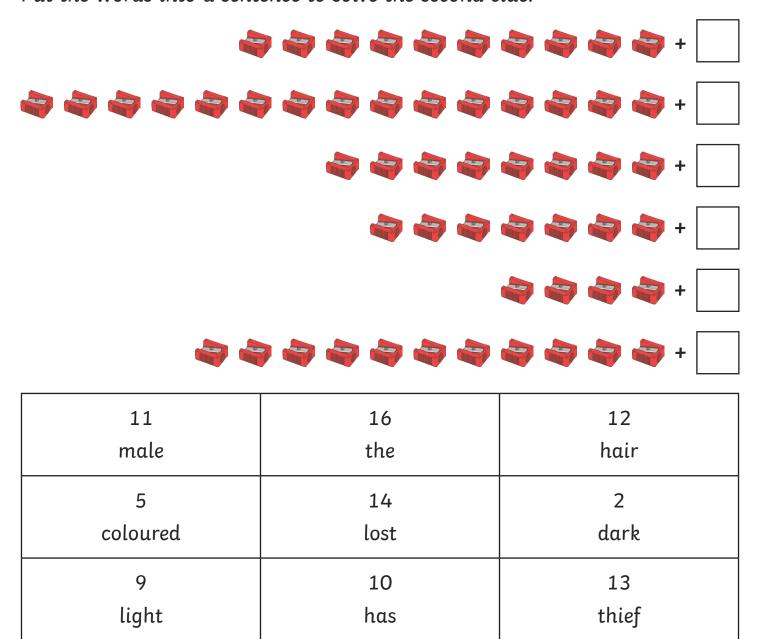




Here are some pencil sharpeners. How many more sharpeners do you need to add to make 20 altogether?

Write your answers in the empty boxes.

Find the answers in the table below. Colour in the numbers you have used. Put the words into a sentence to solve the second clue.



Answer to clue 2:





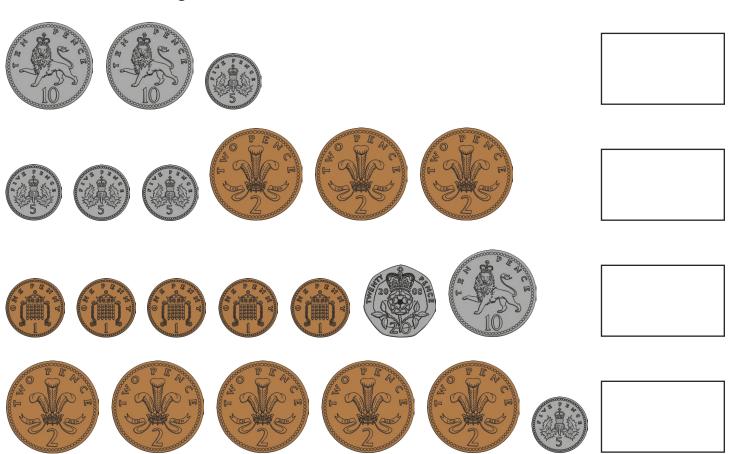


#### Clue 3



## **Adding Coins**

Add these coins together.



If the coins added together to make these totals, the thief is male:

25p

35p

**12**p

16p

If the coins added together to make these totals, the thief is female:

35p

25p

15p

21p

#### Answer to clue 3:

The thief is male/female







Match up the descriptions with the shapes. Then, use the words to make a sentence.

I have four sides and four vertices.

All my sides are the same length.

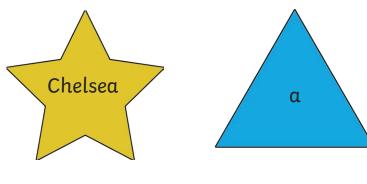
I have one curved side and no vertices.

I have four sides. Two sides are short and two sides are long.

I have five sides, all the same length, and five vertices.

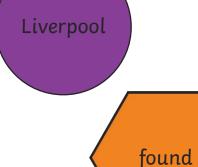
I have three sides and three vertices.

I have six sides, all the same length, and six vertices.













Manchester United /

Answer to clue 4:





A survey was done on the contents of some pencil cases.

Use the tally to complete the block graph then answer the questions.

Find the answers in the table below and solve the last clue.

Object in a pencil case	tally	total
sharpener	Ш	
eraser	JHT 1111	
ruler		
pencil		
gel pen	JHT 1	

- 1. Look at the most common object. How many are there?
- 2. Look at the least common object. How many are there?
- 3. How many sharpeners and rulers are there altogether?
- 4. How many more erasers than gel pens are there?
- 5. What is the difference between the number of pencils and the number of rulers?
- 6. How many pencils and pencil sharpeners are there altogether?

7	9	4
the	orange	peel
2	10	8
apple	stones	thief
3	15	3
dropped	cherry	some





10			
9			
8			
7			
6			
5			
4			
3			
2			
1			

Answer to clue 5:	

Have you solved the mystery of the pencil case thief?





### **Clue 1: Missing Numbers**

3, 4, 5, 6, 7, 8, 9

11, 12, **13**, 14, **15**, 16

7, 6, 5, **4**, **3**, 2

10, **9**, 8, 7, 6, **5** 

15, 14, 13, **12**, **11**, 10

20	12	0	9	4
walks	<b>pencil</b>	under	<b>thief</b>	in
13	2	8	11	10
case	male	goes	car	female
5	6	3	7	15
<b>to</b>	<b>the</b>	school	found	<b>a</b>

Answer to clue 1: The pencil case thief goes to school in a car.

### Clue 2: How Many Sharpeners?

11	16	12
male	the	hair
5	14	2
coloured	lost	dark
9	10	13
light	has	thief

Answer to clue 2: The thief has light coloured hair.

#### Clue 3: Adding Coins

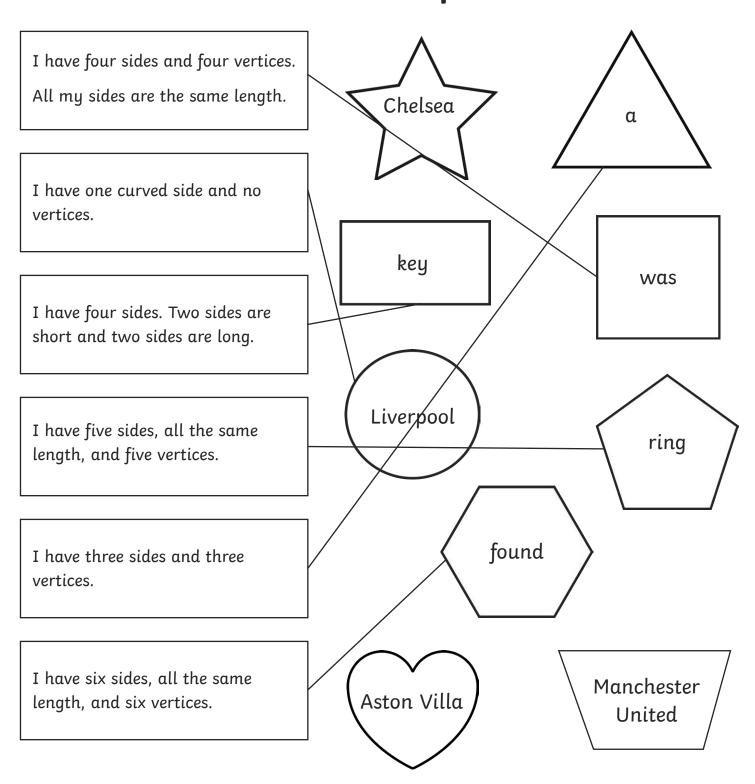
The coins added together to make these totals so the thief is **female**:

35p 25p 15p 21p





### Clue 4: What Shape Am I?



Answer to clue 4: A Liverpool key ring was found.



## Clue 5: What's in My Pencil Case?

7	9	4
the	orange	peel
2	10	8
apple	<b>stones</b>	<b>thief</b>
3	15	3
<b>dropped</b>	<b>cherry</b>	some

Answer to clue 5: The thief dropped some cherry stones.

Have you solved the mystery of the pencil case thief?

The pencil thief is Ruby.



