

The Mystery of the Missing Reindeer Bells

Maths Game



Santa has been getting ready all year for Christmas Eve, when he will travel the world delivering presents to all the girls and boys. His elves have been very busy making the presents, wrapping them and storing them in the enormous stockrooms.

The reindeer have been resting ready for their epic journey and are keen to get going.

But what's this? Disaster has struck! One of the naughty elves has hidden all the beautiful shiny gold bells which decorate the reindeer's harnesses. The reindeer cannot fly without them!

Which one of them would do such a thing?

Your task is to solve the clues and use the descriptions of the elves, to work out who the culprit of the hidden bells is.

Santa is depending on you!

Good luck!



Descriptions of the Elves

Name	Male or Female	Job at Santa's Workshop	Hat Colour	Shoe Type	Hair Colour
Bitsy	female	wrapping	red	pointy	black
Crumble	male	packing	green	curly	ginger
Dippy	male	wrapping	green	curly	brown
Fizz	female	packing	blue	pointy	black
Misty	female	toy maker	green	pointy	black
Neil	male	packing	green	curly	blonde
Pip	male	wrapping	blue	pointy	black
Tazzy	female	toy maker	red	pointy	ginger
Jip	male	researcher	yellow	curly	brown
Kizzy	female	wrapping	green	curly	brown
Jazz	female	researcher	yellow	pointy	blonde
Neville	male	toy maker	green	curly	brown
Candy	female	packing	blue	curly	blonde
Ernest	male	researcher	red	pointy	brown
Bert	male	packing	green	curly	ginger
Tinsel	female	toy maker	yellow	pointy	black
Joy	female	researcher	yellow	curly	brown
Melvyn	male	wrapping	green	curly	black
Sparky	female	packing	red	curly	brown
Jingle	male	toy maker	blue	curly	ginger
Merry	female	wrapping	yellow	pointy	black
Dinky	male	packing	green	curly	brown
Petal	female	researcher	blue	pointy	blonde
Noel	male	wrapping	green	curly	blonde
Snowy	male	toy maker	yellow	pointy	brown

Have you solved the mystery of who hid the reindeer bells?

It was _____.

Clue 1

Ringing in the Missing Numbers



Fill in the missing numbers.

Cross off the numbers from Santa's list when you put them in the empty boxes.

Look at the numbers left on Santa's list.

If the numbers left on the list are **odd**, the bell hider wore curly shoes.

If the numbers left on the list are **even** the bell hider wore pointy shoes.


2 less 3 more

←  →

←  →

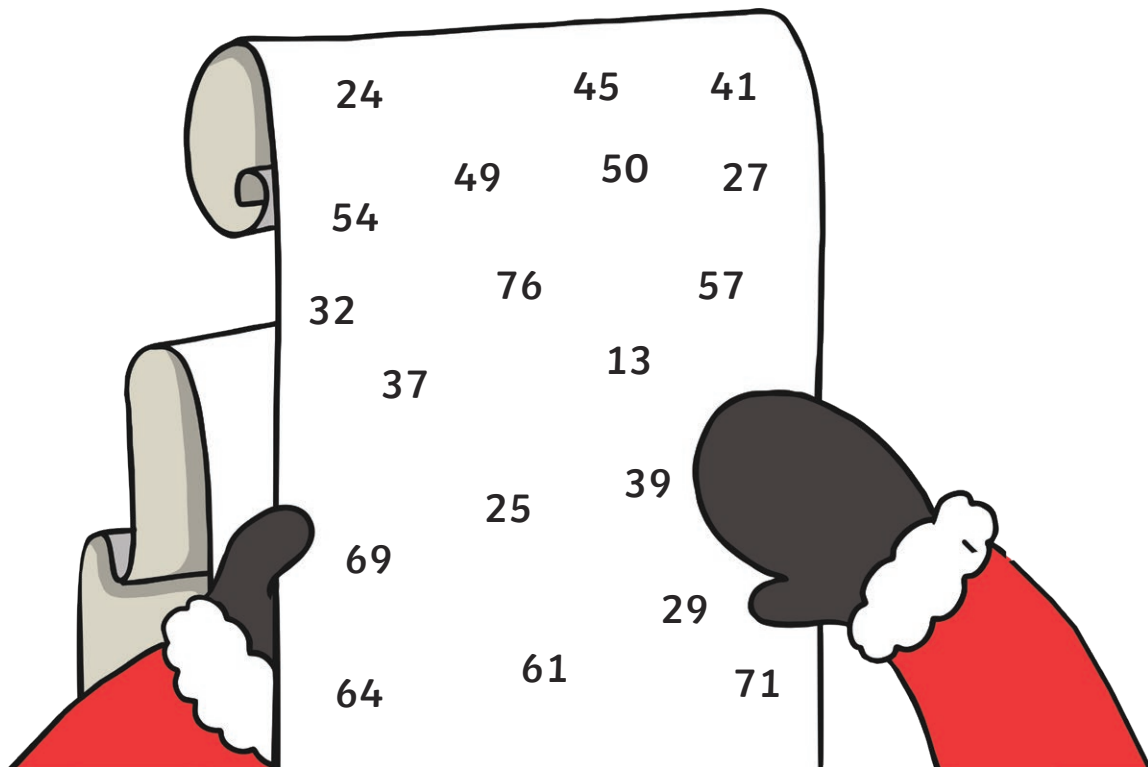
←  →

2 less 3 more

←  →

←  →

←  →



Put a circle around the correct word in the sentence:
The reindeer bell hider wore curly/pointy shoes.



Clue 2

Match the Tags

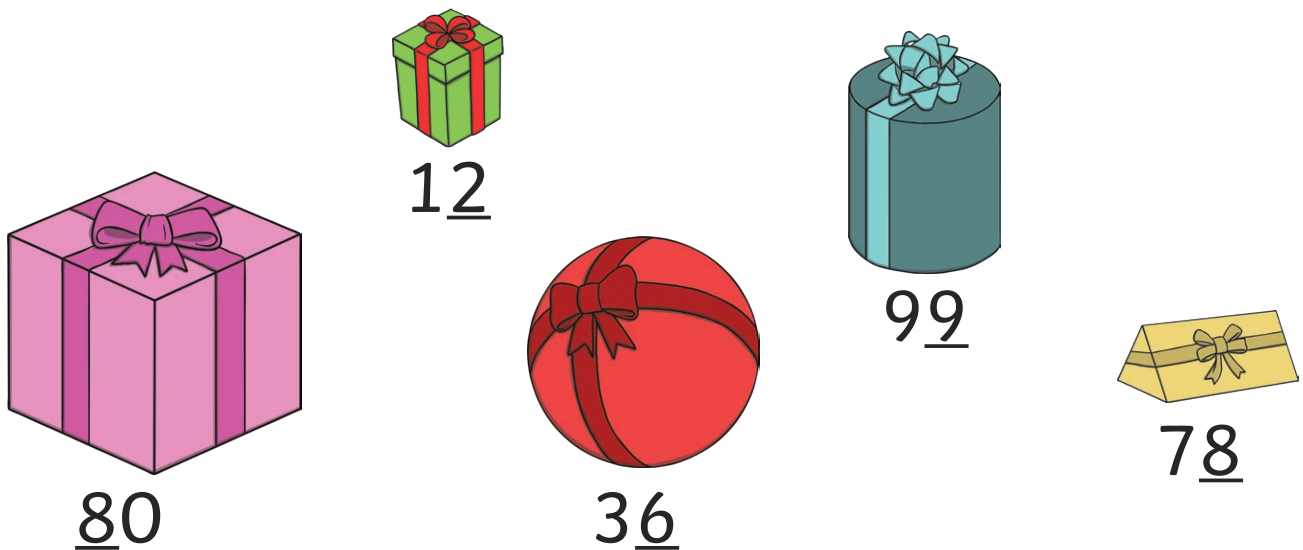
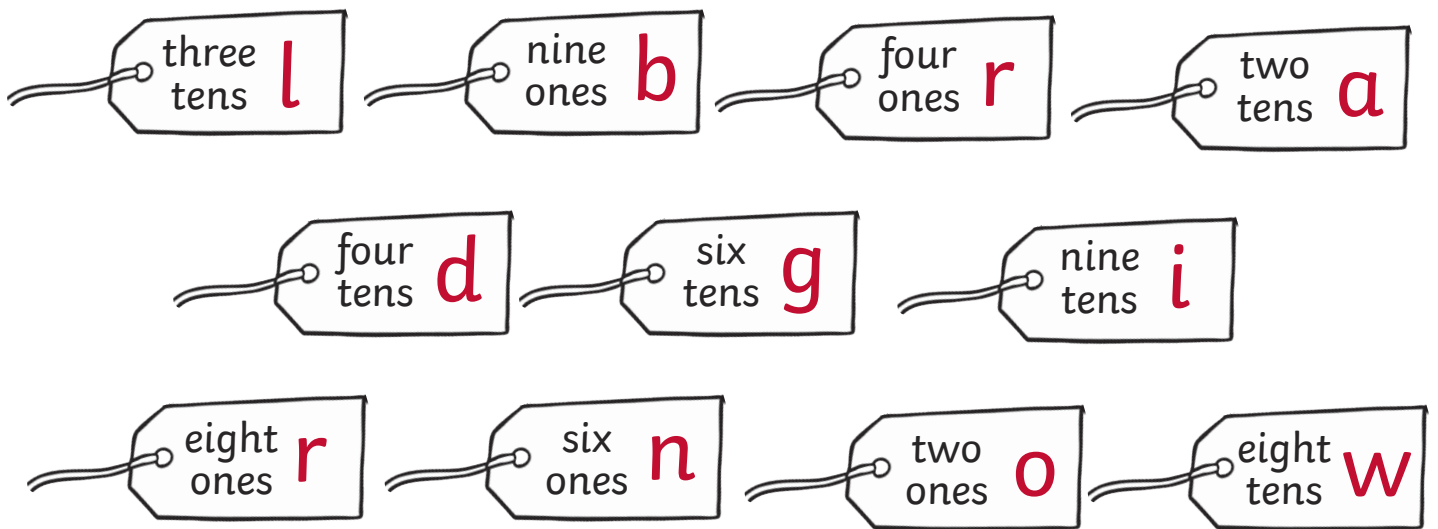


Look at the underlined digit in each of the numbers on the presents.

Think about how many tens or ones that number represents.

Match up the answers on the tags to the present.

Unscramble the letters on your selected tags to spell out the colour of hair which the mischievous elf had.



Answer: The naughty elf has _____ hair.



Clue 3

Elf Problems

Some of the elves have answered some problems, but are they all correct?

Check if they are right. If they are not, put a cross in the **X** column. If they are right, put a tick **✓**.

	Right ✓	Wrong X
Lizzy says that $32 + 9$ is 49. Is she right?		
Frizzle says that $82 - 11 = 71$. Is he right?		
Betsy says that three lots of two equals four. Is she right?		
Grimble says that 12 candy canes shared between him and a friend means they will each have 6 candy canes. Is he correct?		
Ditsy says that this can be worked out: $3 - 8 = 6$. Is she right?		
Jet says that two groups of four has the same total as four groups of two and that the answer is eight. Is he right?		
Tizzy says that $9 + 30$ has the same answer as $19 + 10$. Is she right?		



If there are more ✓ than X, the elf is female.

If there are more X than ✓, the elf is male.

Put a circle around the correct word: male/female



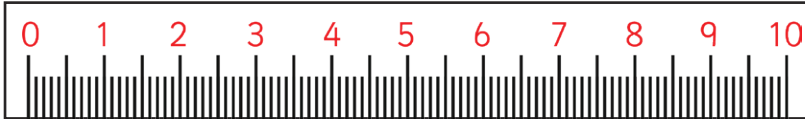


Clue 4

Measure the Elf

Measure the height of the elves to the nearest centimetre.

Find the height in the table below and make a sentence from the words to solve clue number four!



2cm a	4cm hat	6cm wore
5cm culprit	1cm red	8cm green
10cm yellow	3cm the	7cm blue

Answer: _____



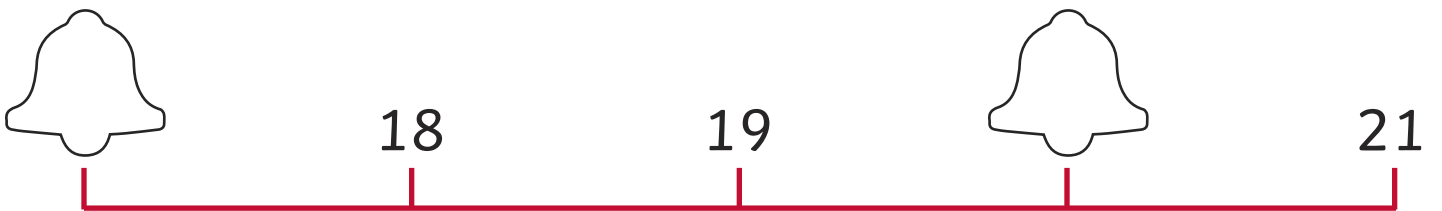
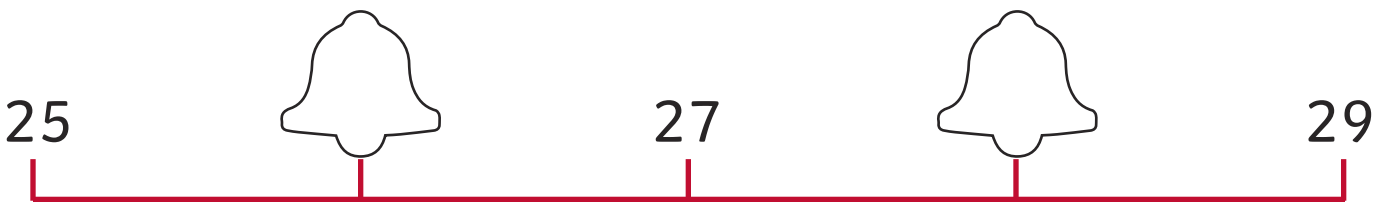
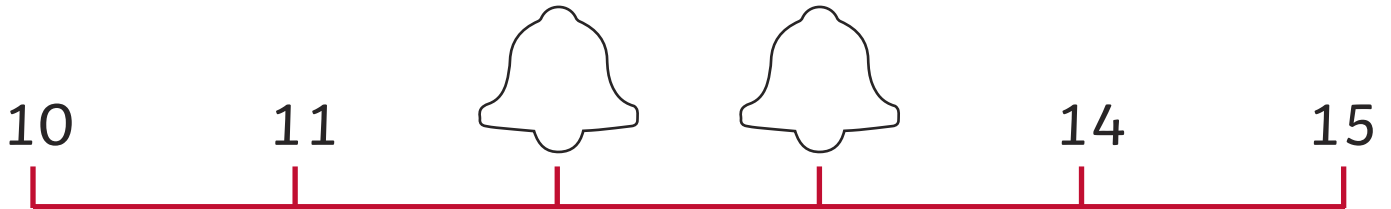
Clue 5

The Missing Bells



Some numbers on the number lines are missing.

Fill in the missing numbers on the bells.



26
elf

22
wrapping

28
was

17
a

16
researcher

8
packing

12
the

13
naughty

20
toymaker

9
worked

Use the numbers you have used on the number line to make a sentence from the words to solve the last clue.



Answer: _____



The Mystery of the Missing Reindeer Bells

Answers

Clue 1 Ringing in the Missing Numbers

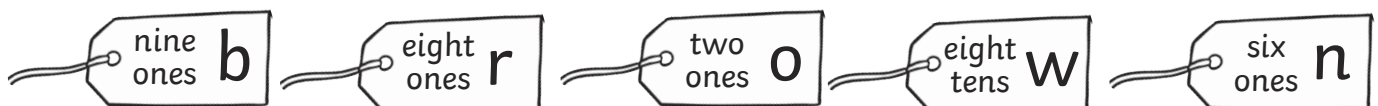
The remaining numbers on Santa's list will be:

57, 13, 39, 25, 61, 49, 27

Therefore, all odd, so the bell hider wore curly shoes.

Clue 2 Match the Tags

Once unscrambled, the selected tags spell 'brown'.



	Right ✓	Wrong ✗
Lizzy says that $32 + 9$ is 49. Is she right?		✗
Frizzle says that $82 - 11 = 71$. Is he right?	✓	
Betsy says that three lots of two equals four. Is she right?		✗
Grimble says that 12 candy canes shared between him and a friend means they will each have 6 candy canes. Is he correct?	✓	
Ditsy says that this can be worked out: $3 - 8$. Is she right?		✗
Jet says that two groups of four has the same total as four groups of two and that the answer is eight. Is he right?	✓	
Tizzy says that $9 + 30$ has the same answer as $19 + 10$. Is she right?		✗

The culprit is male

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Answers

Clue 4 Measure the Elf

The culprit wore a green hat.

2cm a	4cm hat	6cm wore
5cm culprit	1cm red	8cm green
10cm yellow	3cm the	7cm blue

Clue 5 The Missing Bells

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

25, **26**, 27, **28**, 29

17, 18, 19, **20**, 21

The naughty elf was a toymaker.

The elf who hid the reindeer bells was Neville!

