

# 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.

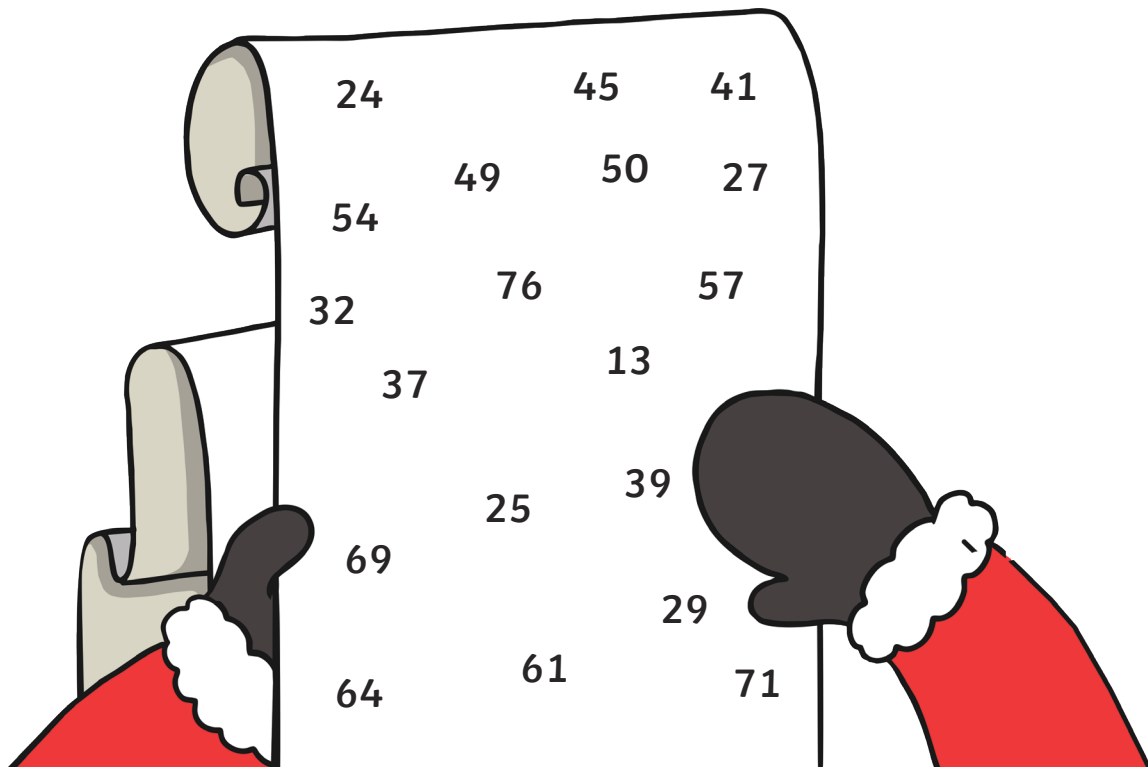
If the numbers left on the list are **even** the bell hider wore pointy shoes.

2 less                      3 more

|                      |   |                                                                                    |   |                      |
|----------------------|---|------------------------------------------------------------------------------------|---|----------------------|
| <input type="text"/> | ← |   | → | <input type="text"/> |
| <input type="text"/> | ← |   | → | <input type="text"/> |
| <input type="text"/> | ← |  | → | <input type="text"/> |

2 less                      3 more

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



# Clue 2

## Match the Tags

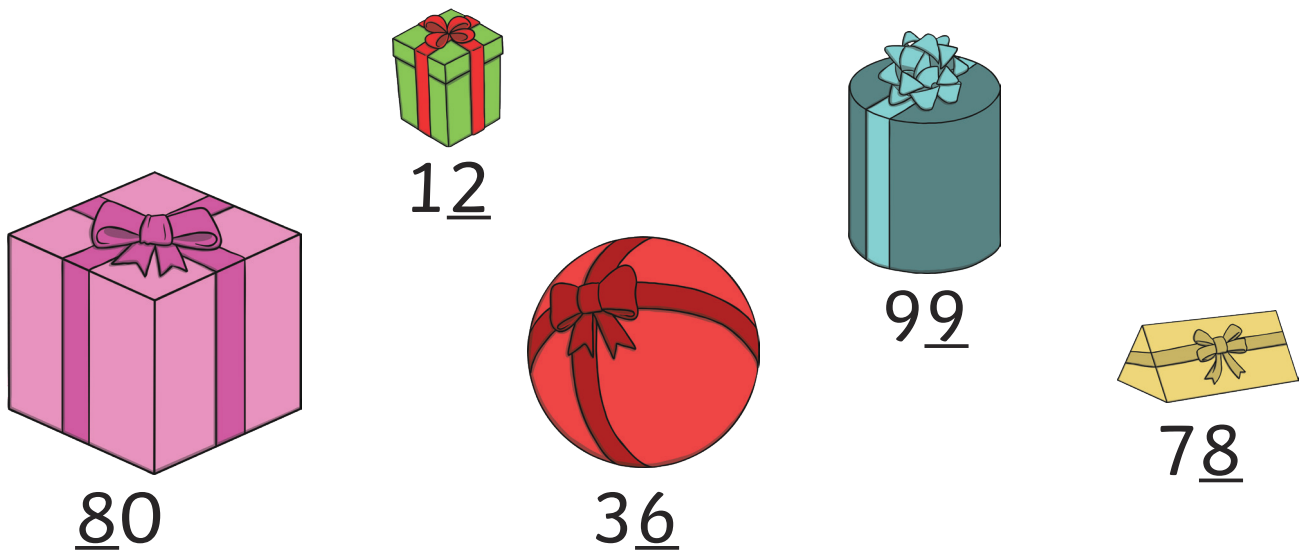
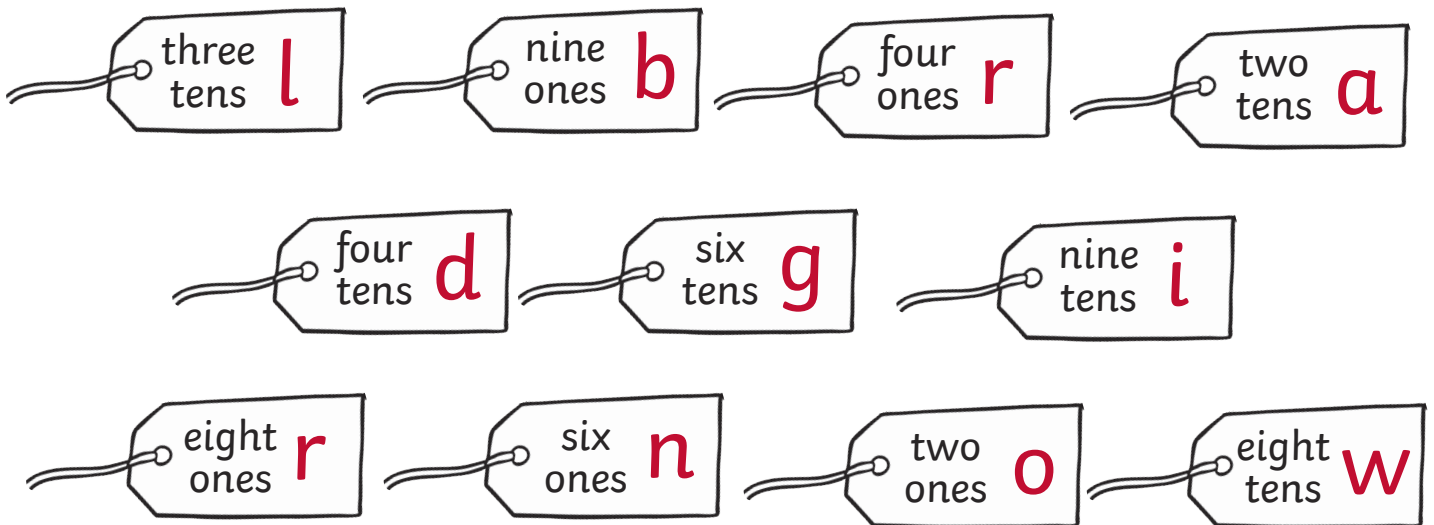


Look at the underlined digit in each of the numbers on the presents.

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 **✗** column. If they are right, put a tick **✓**.

|                                                                                                                          | 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: $3 - 8 = 6$ . 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 **✗**, the elf is female.

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

Put a circle around the correct word: male/female



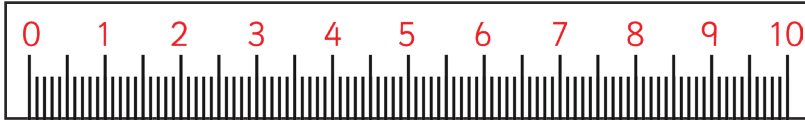


## Clue 4

### 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<br>a       | 4cm<br>hat | 6cm<br>wore  |
| 5cm<br>culprit | 1cm<br>red | 8cm<br>green |
| 10cm<br>yellow | 3cm<br>the | 7cm<br>blue  |

Answer: \_\_\_\_\_



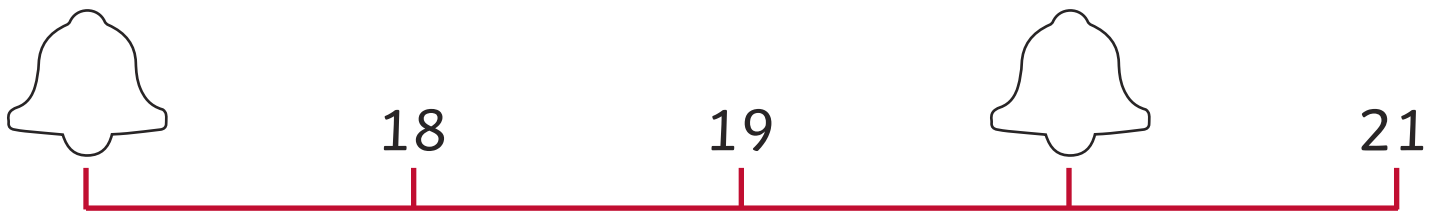
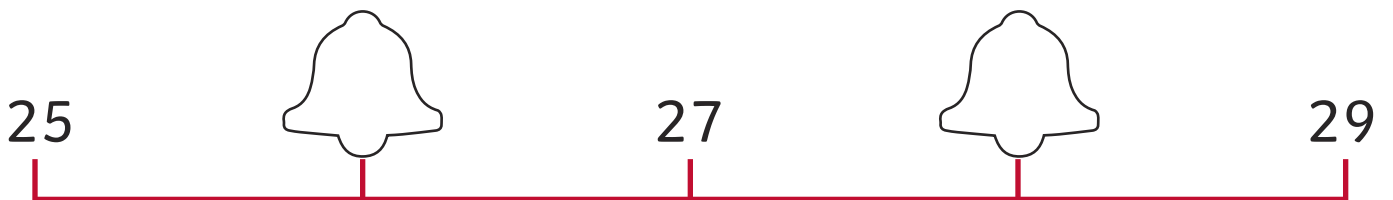
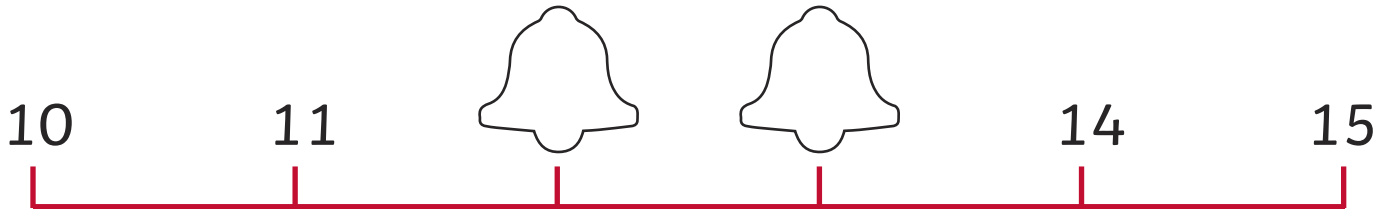
## Clue 5

### 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

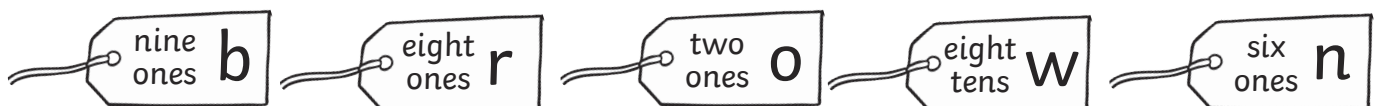
The remaining numbers on Santa's list will be:

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

# The Mystery of the Missing Reindeer Bells

## Answers

### Clue 4 Measure the Elf

The culprit wore a green hat.

|                |            |              |
|----------------|------------|--------------|
| 2cm<br>a       | 4cm<br>hat | 6cm<br>wore  |
| 5cm<br>culprit | 1cm<br>red | 8cm<br>green |
| 10cm<br>yellow | 3cm<br>the | 7cm<br>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!

