

The Mystery of Mrs Claus' Christmas Cake

It is nearly Christmas at Santa's workshop. Everyone has been dashing around getting ready for Santa's busiest night of the year; the reindeer have been brushed and their harness is shining brightly, the elves have been wrapping, packing and stockpiling all the presents ready to be loaded onto the sleigh and Santa has checked his list twice!

Before the busyness truly begins, Mrs Claus likes to cook a traditional Christmas dinner as a thank you for everyone's hard work. The turkey is browning nicely in the oven, the roast potatoes are crisping up and the sprouts are ... well, doing what cooking sprouts do! Mrs Claus' enormous Christmas cake is legendary for being full of fruit. She spends hours rolling out the icing and making beautiful figurines of elves, Santa and the sleigh laden down with presents, which adorn the top of the cake.

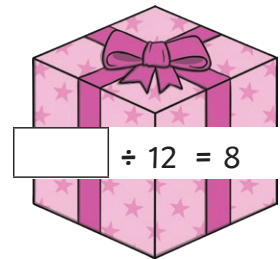
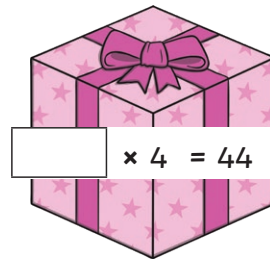
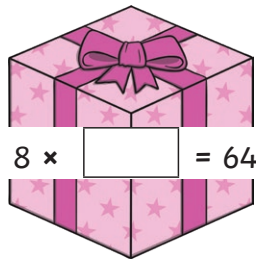
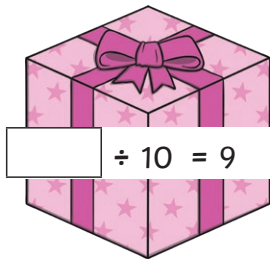
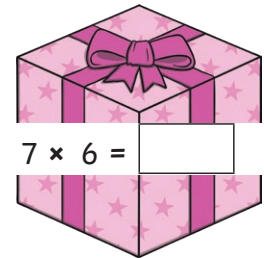
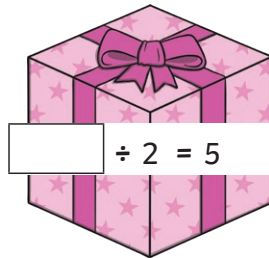
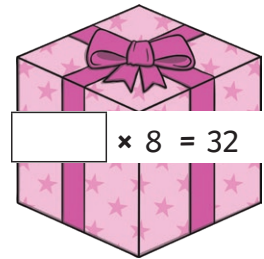
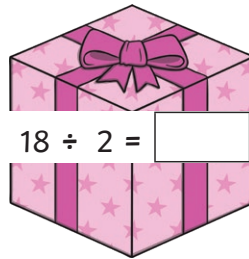
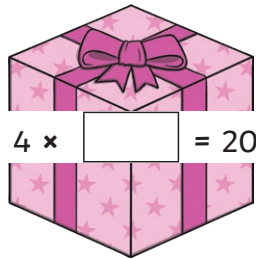
But wait! What's this? Mrs Claus has gone into the larder to get the cake out ready for dinner, and discovered that someone has crept in and eaten most of it! Who would do such a dreadful thing?

Your task is to use the clues and the descriptions of the elf suspects and work out the identity of the Christmas-cake muncher!

Name	Gender	Job in the Workshop	Type of Hat	Type of Shoes	Favourite Christmas Food
Bitsy Baubles	F	manufacture	stripy red	glittery	sprouts
Tinsel Tazzy	F	manufacture	all green	with bells	turkey
Dotty Ditto	F	packing	spotty red	with bells	pigs in blankets
Jingles Jazz	M	wrapping	stripy red	with bells	turkey
Dash Dawdle	M	researcher	stripy green	curly tips	pigs in blankets
Buddy Bumble	M	wrapping	stripy red	with bells	turkey
Berry Brill	F	packing	stripy green	glittery	mince pies
Kringle Kingly	M	researcher	spotty red	pointed	pigs in blankets
Sugarplum Shine	F	manufacture	all green	with bells	mince pies
Jinx Jangle	M	wrapping	stripy red	with bells	sprouts
Noelle N	F	manufacture	stripy red	glittery	mince pies
Mistletoe Magic	M	packing	all green	curly tips	mince pies
Elfie Elf	F	wrapping	stripy green	curly tips	turkey
Tiny Teensy	M	manufacture	stripy red	with bells	sprouts
Juniper Ju	F	researcher	spotty red	glittery	pigs in blankets
Snowball Schnitzel	M	wrapping	stripy red	with bells	sprouts
Belle Ball	F	packing	all green	glittery	turkey
Merry May	F	packing	stripy green	with bells	sprouts
Buster Boo	M	manufacture	spotty red	curly tips	mince pies
Frizzle Fizz	M	wrapping	stripy red	with bells	mince pies
Sparkle Sprite	F	manufacture	stripy green	glittery	sprouts
Blitz Blam	M	wrapping	stripy red	with bells	pigs in blankets
Pepper Prina	F	wrapping	stripy green	curly tips	mince pies
Frosty Frank	M	wrapping	stripy red	with bells	sprouts
Jazzy Jay	M	manufacture	stripy green	pointed	turkey
Kizzy Kit	F	packing	spotty red	glittery	pigs in blankets
Twinkle Twinny	F	researcher	stripy red	with bells	mince pies
Winky William	M	manufacture	all green	curly tips	turkey
Lizzy Lovely	F	researcher	stripy red	with bells	pigs in blankets
Pine Pop	M	packing	stripy green	pointed	mince pies

Clue 1: Elf Numbers

Complete the number statements. Find the missing numbers in the table below and use the words in a sentence to solve the first clue.



9 from	8 the	20 curly	42 found
11 larder	36 glittery	96 bell	80 dropped
12 near	10 a	5 shoe	4 a
60 was	48 pointed	90 in	2 not

Answer to Clue 1: _____

Clue 2: Elven Code

Answer the questions and use the alphabet to help you spell out the answer to the second clue.

a	b	c	d	e	f	g	h	i	j	k	l	m
1	2	3	4	5	6	7	8	9	10	11	12	13

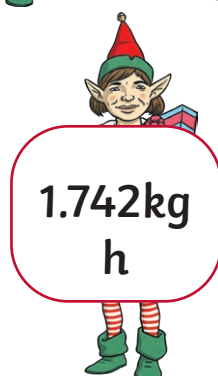
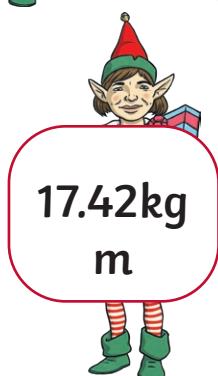
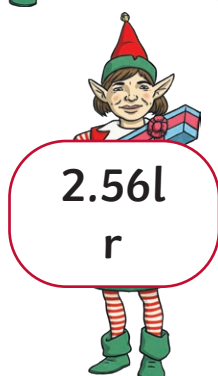
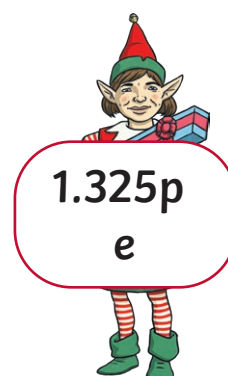
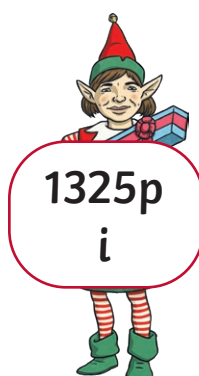
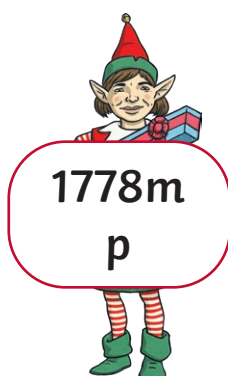
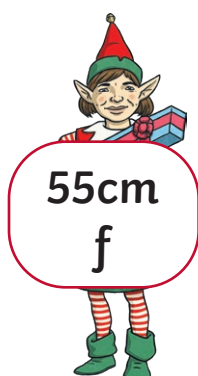
n	o	p	q	r	s	t	u	v	w	x	y	z
14	15	16	17	18	19	20	21	22	23	24	25	26

	Answer	Letter
45 - 25		
4×2		
How many sides does a pentagon have?		
The number of hundreds in 6552.		
If a square flower bed has a perimeter of 48m, what is the length of one side?		
$\frac{1}{3}$ of 18		
1501 - 1478		
The number of minutes between 17:51 and 18:06.		
XXV - VII		
$20 \div 4$		
The number of ones in the answer to $105 \div 5$		
$58 - 39 =$		
$200 \div 10$		
6×3		
If there are 27 biscuits to be shared between three plates, how many biscuits will be on each plate?		
4 lots of 4		
Lydia has £50. She spends half of the money on a bag. How much money does she have left?		
$71 - 53$		
$60 \div 12$		
$36 \div 9$		
24, 72, 16 and 32 are multiples of which number?		
2319 - 2318		
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$		

Answer to Clue 2: _____

Clue 3: Converting Elves

Here are some measurements. The mischievous elves have the conversions of these measurements. The measurements and letters left over will spell out the answer.



Answer to Clue 3: _____

Clue 4: Roman Elves

Work out the Roman numerals and find the answers in the table. Order the words to make a sentence to solve the clue.



100 packing	26 munching	7 research	21 elf
30 cake	16 manufacturing	9 wrapping	29 worked
17 in	50 the	8 department	6 the

Answer to Clue 4: _____

Clue 5: A Maze of Food

Using only addition or subtraction of either 10 or 100, find a path from the start number to the answer. For example, if you start on 130, you can either get to 140 or 120 (plus or minus 10) or 30 or 230 (plus or minus 100).

Start 45	55	75	105	151	303	110	25
44	155	85	203	140	293	280	270
100	145	245	235	253	273	263	253
101	130	122	135	103	113	123	113
200	103	133	125	225	325	305	295
220	193	123	105	220	315	445	425
105	89	95	290	115	415	405	302
sprouts	79	pigs in blankets	300	turkey	410	395 mince pies	314

Answer to Clue 5: _____

Have you solved the mystery of who ate Mrs Claus' Christmas cake?

Answers

Clue 1: Elf Numbers

$4 \times 5 = 20$

$18 \div 2 = 9$

$4 \times 8 = 32$

$10 \div 2 = 5$

$5 \times 12 = 60$

$7 \times 6 = 42$

$90 \div 10 = 9$

$8 \times 8 = 64$

$11 \times 4 = 44$

$96 \div 12 = 8$

9 from	8 the	20 curly	42 found
11 larder	36 glittery	96 bell	80 dropped
12 near	10 a	5 shoe	4 a
60 was	48 pointed	90 in	2 not

Answer to Clue 1: A bell from a shoe was found in the larder.

Clue 2: Elven Code

	Answer	Letter
$45 - 25$	20	t
4×2	8	h
How many sides does a pentagon have?	5	e
The number of hundreds in 6552.	5	e
If a square flower bed has a perimeter of 48m, what is the length of one side?	12	l
$\frac{1}{3}$ of 18 please format as fraction	6	f
$1501 - 1478$	23	w
The number of minutes between 17:51 and 18:06.	15	o
XXV - VII	18	r
$20 \div 4$	5	e
The number of ones in the answer to $105 \div 5$	1	a
$58 - 39 =$	19	s
$200 \div 10$	20	t
6×3	18	r
If there are 27 biscuits to be shared between three plates, how many biscuits will be on each plate?	9	i
4 lots of 4	16	p
Lydia has £50. She spends half of the money on a bag. How much money does she have left?	25	y
$71 - 53$	18	r
$60 \div 12$	5	e
$36 \div 9$	4	d
24, 72, 16 and 32 are multiples of which number?	8	h
$2319 - 2318$	1	a
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	20	t

Answer to Clue 2: **The elf wore a stripy red hat.**

Clue 3: **Converting Elves**

Answer to Clue 3: **male**

Clue 4: Roman Elves

100 packing	26 munching	7 research	21 elf
30 cake	16 manufacturing	9 wrapping	29 worked
17 in	50 the	8 department	6 the

Answer to Clue 4: **The cake munching elf worked in the wrapping department.**

Clue 5: A Maze of Food

Start 45	55	75	105	151	303	110	25
44	155	85	203	140	293	280	270
100	145	245	235	253	273	263	253
101	130	122	135	103	113	123	113
200	103	133	125	225	325	305	295
220	193	123	105	220	315	445	425
105	89	95	290	115	415	405	302
sprouts	79	pigs in blankets	300	turkey	410	395 mince pies	314

Answer to Clue 5: **The elf's favourite food is mince pies.**

Have you solved the mystery of who ate Mrs Claus' Christmas cake?

Frizzle Frizz