

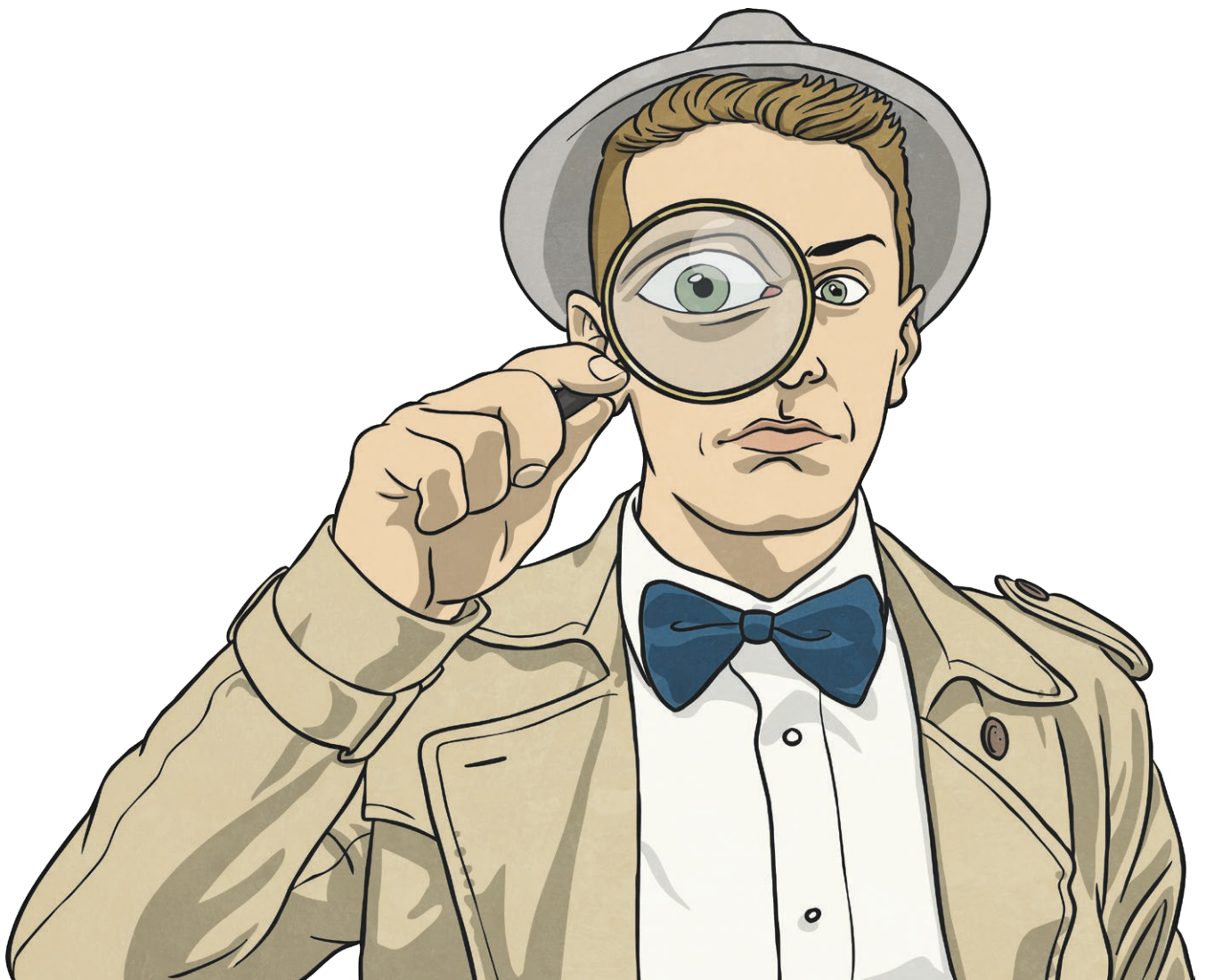
The Place Value Mystery of the Thief at Gideon Gold's Chocolate Factory

Good evening. You join us here at the scene of the crime in Little Hadfield, at the factory of Gideon Gold where the exclusive chocolates Delectable Dream Drops are created. Forensic police are investigating how this appalling crime has happened, and are taking down the descriptions of suspects and taking statements, as we speak!

At around 1.30a.m. on Tuesday, someone broke into the factory and took the plans from the highly secure safe. Each member has had to sign a contract of secrecy and no one is allowed to be alone in the presence of the plans!

The suspect is an employee of Gold Chocolatiers Ltd. and must be found as soon as possible, before the plans are sold to rival companies!

Your task is to solve the clues and use the descriptions of the suspects to unmask the safe-cracker!



The Place Value Mystery of the Thief at Gideon Gold's Chocolate Factory

Name	M/F	Job in the Factory	Wears a Hat	Transport to Work	Size Shoe
Ashael Able	m	packing	yes	car	7
Betsy Browne	f	taste tester	yes	car	4
Chi Chew	m	marketing	no	car	8
Dabinn Dray	f	production	yes	walks	6
Eben Emanuel	m	team leader	sometimes	cycles	10
Florence Flame	f	packing	yes	car	7
Gabriel Green	m	marketing	no	car	7
Horatio Hound	m	production	yes	bus	8
Isabella Isaac	f	packing	yes	car	7
Joss Jerry	f	production	yes	walks	5
Kamil Krill	m	team leader	sometimes	car	10
Lysander Leaf	m	production	yes	bus	9
Maria Mayes	f	taste tester	yes	car	5
Niamh Neve	f	packing	yes	car	5
Oswald Owen	m	team leader	sometimes	cycles	8
Phileas Fear	m	production	yes	cycles	11
Quinby Quarter	m	taste tester	yes	car	12
Ruth Raine	f	production	yes	car	6
Scarlett Snow	f	packing	yes	bus	4
Theo Thumb	m	marketing	no	car	9
Usha Umrani	f	taste tester	yes	bus	5
Violet Vain	f	packing	yes	car	6
Warren Whist	m	taste tester	yes	car	11
Xavier Xi	m	marketing	no	car	10
Yuri Yale	m	team leader	sometimes	walks	8
Zarin Zardari	f	production	yes	walks	5
Nathaniel Newsome	m	production	yes	cycles	9
Wilhemina West	f	marketing	no	car	4
Constance Corn	f	marketing	no	car	6
Benedict Brew	m	taste tester	yes	bus	11

Clue 1

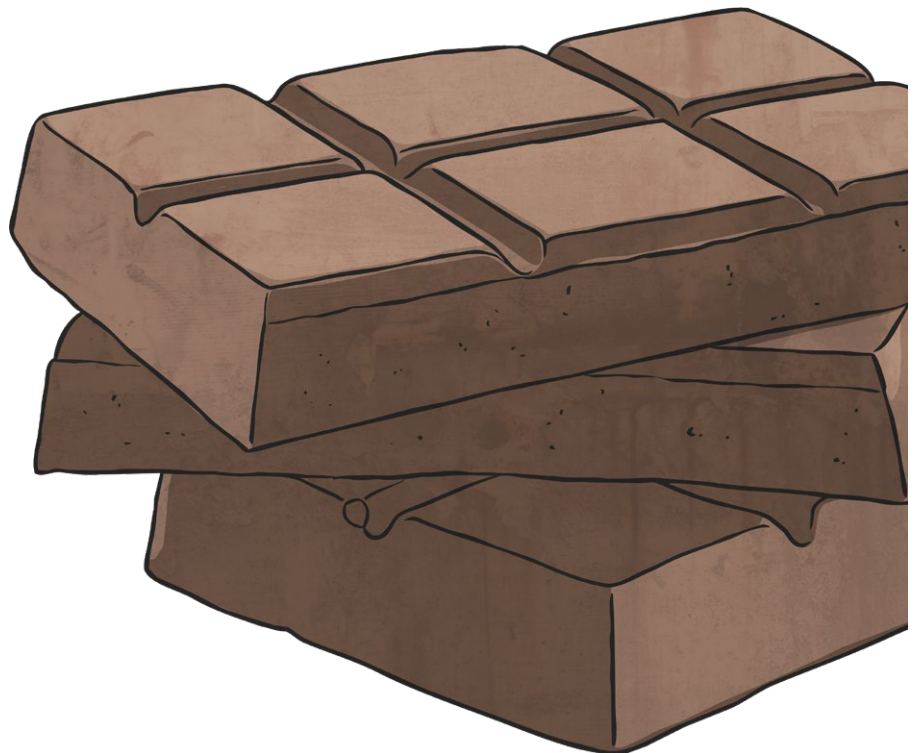
Work out what the sequences are going up or down in and fill in the missing numbers. Take the last number in each row, find it in the table below and take note of the corresponding word. Once you have found all of the words, order them into a sentence to solve clue 1. Count on in steps of 5 and finish the sequence.

6		12	15		
94		74		54	
	35		45		
88		76		64	
	120		170		
330		230		130	
5		17			
	850		550		

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220 went	45 ticket	80 factory	21 by
20 bus	44 culprit	350 was	36 found
35 the	90 bike	200 a	55 to
75 clip	250 the	58 car	25 walked

Answer to clue 1: _____



Clue 2

Use these signs (<, > and =) to compare the pairs of numbers.

If there are more >, the safe-breaker did not wear a hat.

If there are more <, the safe-breaker wore a hat.

If there are more =, the safe-breaker sometimes wore a hat.

245		254
-----	--	-----

632		626
-----	--	-----

509		590
-----	--	-----

1783		1738
------	--	------

8020		8002
------	--	------

379		397
-----	--	-----

1803		1830
------	--	------

2784		2784
------	--	------

1007		1070
------	--	------

6128		6119
------	--	------

4089		4098
------	--	------

6668		6599
------	--	------



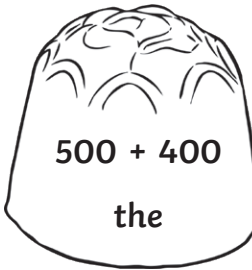


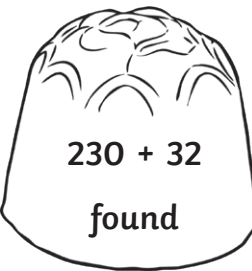
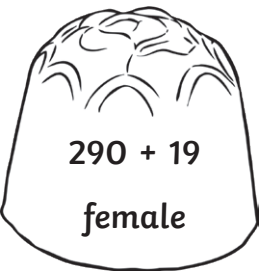



Answer to clue 2: The culprit _____.



Clue 3

Read the numbers in words then identify the correct calculation they equal and colour it in. Order the words with the calculations and solve clue number 3.

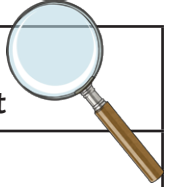
five hundred and four	two thousand, six hundred and thirty-two	seven hundred and three
four hundred and fifty-eight	nine hundred	three hundred and nine

 $600 + 73$ size	 $1000 + 645$ male	 $500 + 400$ the
 $650 + 53$ naughty	 $420 + 38$ was	 $230 + 32$ found
 $290 + 19$ female	 $480 + 24$ safe	 $630 + 2002$ breaker
	 $440 + 100$ shoe	

Answer to clue 3: _____

Clue 4

Make the largest numbers you can from these groups of digits then complete the number statements. Find the correct answers in the table and solve clue number four.



6210 in	7367 marketing	9762 department
8540 thief	8970 shoe	2965 team
9400 near	6540 the	1836 manager
5227 production	2007 footprint	9871 worked
9932 plan	4275 lost	8431 the
6208 size	8542 packing	3766 leader

7	6	2	9

2	3	9	9

4	8	1	3

6	0	4	5

5	8	4	2

7	8	9	1

1	0	6	2

0	4	8	5

Answer to clue 4: _____

Clue 5

What is the value of the underlined numbers?

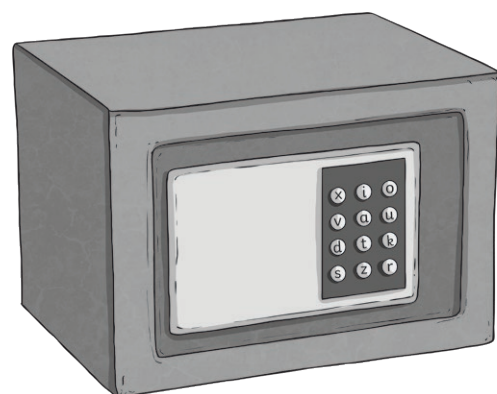
2 <u>5</u> 89	83 <u>6</u> 8	1 <u>5</u> 67	30 <u>4</u> 0	99 <u>9</u> 9	7 <u>6</u> 43
167 <u>1</u>	<u>7</u> 858	<u>5</u> 287	11 <u>1</u> 3	50 <u>5</u> 2	86 <u>2</u> 0

60 plan	800 naughty	200 had	30 was
2 six	6 footprint	4 five	1000 chocolate
100 seven	90 the	500 very	10 were
1 feet	8 a	400 found	80 shoe
600 which	40 thief	300 under	20 size

Answer to clue 5: _____

Have you solved the mystery?

The safe breaking chocolate plan thief is _____.



The Place Value Mystery of the Thief at Gideon Gold's Chocolate Factory - Answers

Clue 1:

The culprit went to the factory by car.

220 went	45 ticket	80 factory	21 by
20 bus	44 culprit	350 was	36 found
35 the	90 bike	200 a	55 to
75 clip	250 the	58 car	25 walked

Clue 2:

There are more < signs

The culprit did wear a hat.

245 < 254	632 > 626	509 < 590
1783 > 1738	8020 > 8002	379 < 397
1803 < 1830	2784 = 2784	1007 < 1070
6128 > 6119	4089 < 4098	6668 > 6599

Clue 3:

The naughty safe breaker was female.

$$900 = 500 + 400 = \text{the}$$

$$703 = 650 + 53 = \text{naughty}$$

$$504 = 480 + 24 = \text{safe}$$

$$2632 = 630 + 2002 = \text{breaker}$$

$$458 = 420 + 38 = \text{was}$$

$$309 = 290 + 19 = \text{female}$$

Clue 4:

The plan thief worked in the packing department.

6210 in	7367 marketing	9762 department
8540 thief	8970 shoe	2965 team
9400 near	6540 the	1836 manager
5227 production	2007 footprint	9871 worked
9932 plan	4275 lost	8431 the
6208 size	8542 packing	3766 leader

Clue 5:

The very naughty chocolate plan thief had feet were which size six.

60 plan	800 naughty	200 had	30 was
2 six	6 footprint	4 five	1000 chocolate
100 seven	90 the	500 very	10 were
1 feet	8 a	400 found	80 shoe
600 which	40 thief	300 under	20 size

Have you solved the mystery?

The chocolate plan thief of Gideon Gold's chocolate factory was Violet Vain.