

The Winter Olympics Mystery of the Sabotaged Bobsleigh Track Maths Game

You join us on day five of the Winter Olympics. The spectators have gathered in their hundreds to witness history being made today. 20 countries are going for gold in the four-man bobsleigh competition. The competitors have been training hard for the last four years - the stakes are high!

Oh no, wait! Disaster has struck!

Disaster! Someone has sabotaged the bobsleigh track by throwing sand on the track. It has been thrown down the track at different places and the whole event has been cancelled! Who would do such a dreadful act?

Your task is to solve the clues and use the descriptions of the suspects to unmask the saboteur!



Description of the Suspects

Name	Male or Female	Type of Hat	Sports Drink	Favourite Fruit	Height (cm)
Anton Alpine	M	bobble	Taystee	banana	171
Boris Biathlon	M	baseball cap	Pazazz	banana	169
Carter Curling	M	bobble	AllFresh	apple	173
Dabinn Driver	F	Arctic	Zingy	grapes	164
Ellie Eager	F	bobble	AllFresh	orange	160
Farhan Frost	M	bobble	Taystee	orange	171
Gurvinder Goforit	F	beanie	Zingy	banana	159
Hamish Halfpipe	M	bobble	Taystee	grapes	176
Ishmael Icicle	M	bobble	Taystee	banana	179
Jia Jump	F	Arctic	Zingy	grapes	173
Kacper Kool	M	Arctic	AllFresh	apple	172
Lisa Leaper	F	beanie	Pazazz	banana	166
Marius Mover	M	bobble	Taystee	banana	175
Nuwa Nearmiss	F	baseball cap	Zingy	grapes	164
Oscar Outward	M	bobble	Pazazz	banana	176
Peter Puck	M	Arctic	Taystee	orange	177
Rabiya Ravine	F	beanie	Zingy	apple	163
Seren Snow	F	Arctic	Taystee	orange	161
Tessa Track	F	beanie	AllFresh	banana	165
Usman Unsure	M	Arctic	Zingy	orange	177
Veronica Vroom	F	baseball cap	Pazazz	apple	166
Will Wonder	M	bobble	AllFresh	orange	178
Yura Yay	M	bobble	Taystee	banana	173
Zeba Zoom	F	beanie	Pazazz	grapes	164
Abigail Awesome	F	Arctic	Zingy	banana	163
Bertie Bobsleigh	M	bobble	Taystee	grapes	175
Charlie Cheer	M	bobble	AllFresh	orange	177
Daniyel Daring	M	bobble	Taystee	orange	176
Fiona Freeze	F	Arctic	Pazazz	banana	163

Clue 1 Time Out

Match the statements in the stopwatches with the equivalent answer in the table below.
Solve the first clue using the words which are left over in the table.



How many hours are there in 3 days?



How many days are there in a fortnight?



How many days are there in April?



How many months are there in a quarter of a year?



How many minutes are there in 2 hours?



How many minutes are there in a quarter of an hour?



How many years are there in a decade?



How many seconds are there in 3 minutes?

30 a	120 culprit	24 the
72 female	7 saboteur	180 under
12 was	14 bobsleigh	100 male
3 not	10 fan	15 didn't

Answer:

Clue 2 Amazing Hats

A hat was found at the scene of the crime.

Begin at the start of the maze and follow a path by colouring all the multiples of 4 or 8 to discover the type of hat the saboteur dropped.

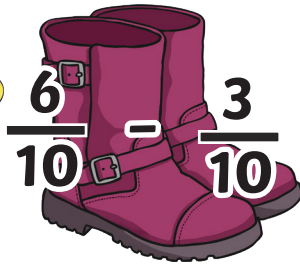
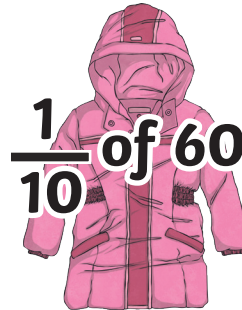
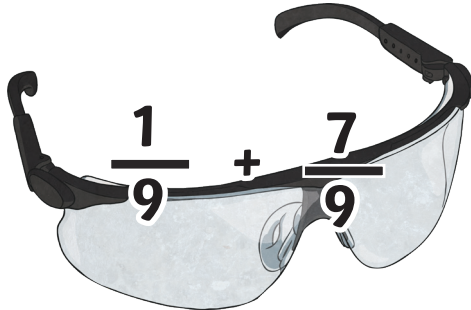
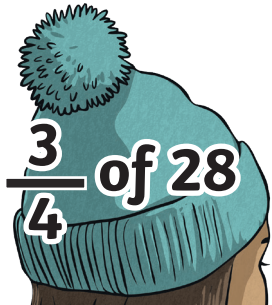
START	4	6	8	10	12	14	16	18	20
6	12	24	9	33	21	13	2	19	25
2	5	8	32	30	46	55	60	17	30
7	10	14	20	16	48	30	40	60	35
15	9	18	22	27	28	52	56	66	44
42	50	11	26	31	36	40	45	50	35
81	45	13	66	27	15	96	19	100	12
18	23	37	35	30	42	44	80	22	18
26	67	70	8	23	16	1	64	16	10
18	32 beanie	13	15	16 Arctic	3	9	88 bobble	14	22 baseball

The saboteur dropped a _____ hat.

Clue 3 Frosty Fractions

Look at these fraction number statements.

Find the answers in the table. The words that are not used in the equipment will solve the third clue.



5.0 saboteur	$\frac{3}{10}$ damaged	6 sand
$\frac{8}{9}$ culprit	$\frac{3}{8}$ liked	20 Taystee
0.05 drinks	21 Tangy	35 track
$\frac{5}{8}$ Allfresh	0.5 the	24 Pazazz

Answer:

Clue 4 Some Sporting Problems

Something was found at the scene of the crime. Solve the clue below and discover what it was.

a	b	c	d	e	f	g	h	i	j	k	l	m
10	11	12	13	14	15	16	17	18	19	20	21	22
n	o	p	q	r	s	t	u	v	w	x	y	z
23	24	25	26	27	28	29	30	31	32	33	34	35

Spell out the answer to the fourth clue.

	Answer	Letter
$\frac{1}{2}$ of 26		
If ski helmets are in boxes of three and there are nine boxes altogether, how many helmets are there in total?		
Double a dozen		
Ice hockey pucks are sold in packs of five. How many pucks would there be if there are five packs?		
$5 \times 4 + 5$		
$\frac{1}{4}$ of 56		
$\frac{1}{3}$ of 39		
$178 - 149$		
Three hundred and fourteen seats were sold in one area. Two hundred and ninety-seven of them were filled. How many remained empty?		
How many bobsleigh competitors are there if there are seven teams of two?		
4×7		
$\frac{1}{10}$ of 200		
If there are nine pairs of skates, how many skates are there altogether?		
$203 - 180$		
The number of hours in a day.		
$30 \div 2$		
$230 \div \square = 23$		
If 12 tickets cost £132, how much does one ticket cost?		
There are 300 seats in one section. If there are 30 rows, how many seats are in each row?		
It is 20:54. The figure skating is running late and starts at 21:17. How many minutes do the spectators have to wait?		

$45 \div \square = 4.5$		
XXIII		
$2.0 \times \square = 20$		

Answer:

Clue 5 The Mystery Height

Work out these column addition and subtraction calculations. Whichever answer occurs the most often is the height of the bobsleigh track saboteur.

$$\begin{array}{r} 3 \ 1 \ 0 \\ - 1 \ 3 \ 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 1 \ 7 \\ + \quad 5 \ 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3 \ 2 \ 8 \\ - 1 \ 4 \ 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 2 \ 2 \\ + \quad 5 \ 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2 \ 2 \ 0 \\ - \quad 4 \ 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5 \ 2 \ 1 \\ - 3 \ 5 \ 0 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8 \ 2 \\ + \quad 9 \ 1 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 2 \ 5 \\ + \quad 4 \ 8 \\ \hline \\ \hline \end{array}$$

The saboteur is _____ cm tall.

The name of the bobsleigh track saboteur is _____

Answers

Clue 1 Time Out

30 a	120 culprit	24 the
72 female	7 saboteur	180 under
12 was	14 bobsleigh	100 male
3 not	10 fan	15 didn't

The remaining words state: THE SABOTEUR WAS MALE

Clue 2 Amazing Hats

START	4	6	8	10	12	14	16	18	20
6	12	24	9	33	21	13	2	19	25
2	5	8	32	30	46	55	60	17	30
7	10	14	20	16	48	30	40	60	35
15	9	18	22	27	28	52	56	66	44
42	50	11	26	31	36	40	45	50	35
81	45	13	66	27	15	96	19	100	12
18	23	37	35	30	42	44	80	22	18
26	67	70	8	23	16	1	64	16	10
18	32 beanie	13	15	16 Arctic	3	9	88 bobble	14	22 baseball

The saboteur dropped a bobble hat.

Clue 3 Frosty Fractions

5.0 saboteur	$\frac{3}{10}$ damaged	6 sand
$\frac{8}{9}$ culprit	$\frac{3}{8}$ liked	20 Taystee
0.05 drinks	21 Tangy	35 track
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SABOTEUR LIKED TAYSTEE DRINKS

Clue 4 Some Sporting Problems

	Answer	Letter
$\frac{1}{2}$ of 26	13	d
If ski helmets are in boxes of three and there are nine boxes altogether, how many helmets are there in total?	27	r
Double a dozen	24	o
Ice hockey pucks are sold in packs of five. How many pucks would there be if there are five packs?	25	p
$5 \times 4 + 5$	25	p
$\frac{1}{4}$ of 56	14	e
$\frac{1}{3}$ of 39	13	d
$178 - 149$	29	t
Three hundred and fourteen seats were sold in one area. Two hundred and ninety-seven of them were filled. How many remained empty?	17	h
How many bobsleigh competitors are there if there are seven teams of two?	14	e
4×7	28	s

DROPPED THE SKIN OF A BANANA

Clue 5 The Mystery Height

The saboteur is 173cm tall.

The bobsleigh track saboteur is Yura Yay!

$\frac{1}{10}$ of 200	20	k
If there are nine pairs of skates, how many skates are there altogether?	18	i
$203 - 180$	23	n
The number of hours in a day.	24	o
$30 \div 2$	15	f
$230 \div \square = 23$	10	a
If 12 tickets cost £132, how much does one ticket cost?	11	b
There are 300 seats in one section. If there are 30 rows, how many seats are in each row?	10	a
It is 20:54. The figure skating is running late and starts at 21:17. How many minutes do the spectators have to wait?	23	n
$45 \div \square = 4.5$	10	a
XXIII	23	n
$2.0 \times \square = 20$	10	a

Clue 5 The Mystery Height

The saboteur is **173cm** tall.

The bobsleigh track saboteur is **Yura Yay!**