The Mystery of the Missing Microphones at the End of Term Play

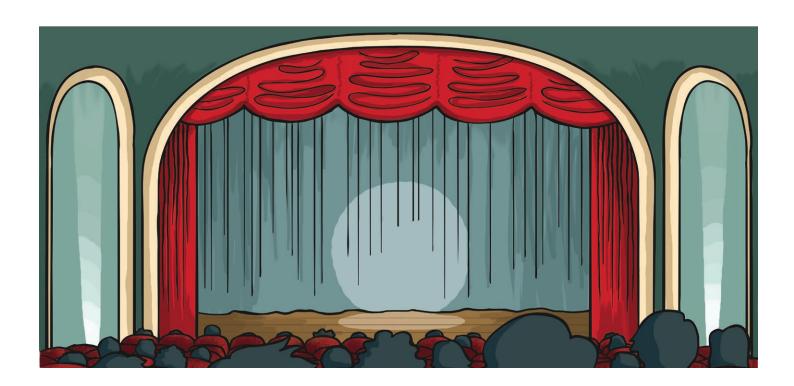
The pupils of High Brook Academy are very excited about performing their end of term play. Scenes have been practised, songs have been learned, costumes made and they are all set for opening night.

Parents have grabbed their seats and got their phones at the ready, to record the momentous occasion.

The play is being performed in a huge auditorium. Thank goodness the actors have headsets and microphones or else they would never be heard.

But wait! What's this? Someone has stolen all the headsets and microphones! They have disappeared from the cupboard.

Your job is to use the descriptions of the suspects, and analyse the clues that have been left behind, to solve the mystery of the missing microphones at the end of term play!







The Mystery of the Missing Microphones

Name	M/ F	Age	Wears a chain	Favourite meal	Shoe size
Aiden Actor	М	9	no	pizzα	3
Brittany Bow	F	8	yes	curry	2
Charlie Cast	М	9	yes	fish and chips	3
Dylan Director	М	10	yes	burger	3
Eli End	М	9	no	fish and chips	2
Freya Footnote	F	10	yes	curry	3
Gurvinder Greenroom	F	10	yes	pizzα	2
Haya Hilarious	F	8	yes	curry	2
Isaac Interval	М	8	no	burger	2
Josh Joker	М	9	yes	curry	4
Kayleigh Kidman	F	10	no	fish and chips	3
Lily Leadrole	F	9	yes	curry	3
Mohammed Main	М	8	yes	fish and chips	2
Nevin Newcomer	F	9	yes	pizzα	3
Oscar Ovation	М	10	no	curry	4
Penelope Prompt	F	10	no	fish and chips	4
Queenie Quit	F	8	no	burger	2
Ruben Reynolds	М	8	yes	fish and chips	2
Sophia Songstress	F	9	yes	fish and chips	3
Thea Theatre	F	10	no	curry	4
Uri Understudy	М	8	no	pizzα	3
Violet Vivacious	F	9	yes	pizzα	3
Winston Writer	М	10	no	burger	4
Xanthe Xtra	F	8	no	pizza	2
Yang Youth	М	9	yes	burger	3
Zeba Zany	F	9	yes	burger	3
Astrid Amazing	F	8	no	fish and chips	2
Bilhal Better	М	10	yes	pizzα	4
Carrie Cateur	F	10	yes	curry	3
Delilah Disaster	F	9	no	pizzα	3
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Clue 1: What's Your Angle?

Work out whether these angles are obtuse or acute.

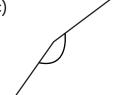
Obtuse angles	
Acute angles	



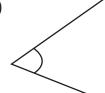




c)



d)

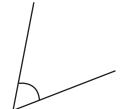




f)



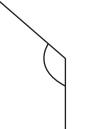
g)



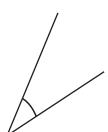
h)

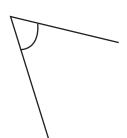


i)



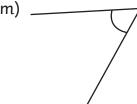
j)







m)



If there are more acute angles, the microphone thief wore a chain and dropped it. If there are more obtuse angles, the microphone thief does not wear a chain.

Answer:

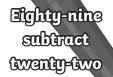


Clue 2: Words Equal Numbers

Solve these word calculations and then, colour in the answers in the table below to solve the clue.

51	35	67	66	
was	eight	thief	male	
8	502	20	363	
curry	years	fish and chips	age	
150	57	6	50	
microphone	burger	the	shoe	
28	80	353	29	
size	of	ten	nine	











Ninety-nine minus forty-eight



Fifty-seven subtract twenty-eight

Answer:



Clue 3: Give Me More Time

Use these signs in the empty boxes: < > =

1. 180 minutes 3 hours

5. 22 days 3 weeks

2. $\frac{1}{2}$ a year 8 months

6. 150 minutes 3 hours

3. 97 hours 4 days

7. $\frac{1}{3}$ of a year 5 months

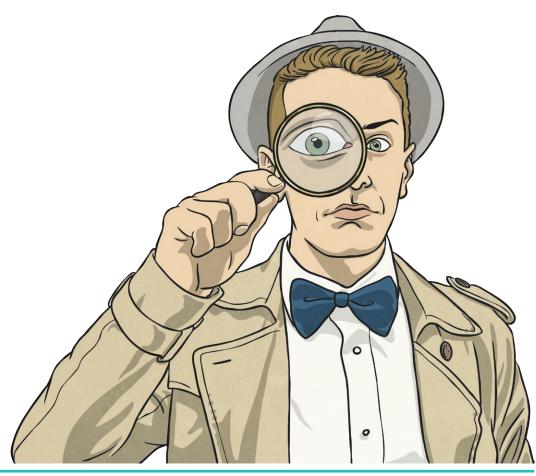
4. 95 minutes $1\frac{1}{2}$ hours

1 $\frac{1}{2}$ hours 8. $\frac{3}{4}$ of an hour 50 minutes

If you have used more > signs then the thief is male.

If you have used more < signs then the thief is female.

Answer: female male





Clue 4: Missing Fractions

A footprint was found near the prop cupboard.

Work out the missing fraction and solve the fourth clue.

1.
$$\frac{1}{4} + \frac{2}{4} =$$

4.
$$\frac{5}{7}$$
 - $\boxed{}$ = $\frac{2}{7}$ 7. $\frac{7}{9}$ - $\frac{3}{9}$ = $\boxed{}$

7.
$$\frac{7}{9} - \frac{3}{9} =$$

2.
$$\frac{9}{10} - \frac{4}{10} =$$

5.
$$\frac{2}{8} + \frac{4}{8} =$$

8.
$$\frac{2}{7}$$
 + = $\frac{6}{7}$

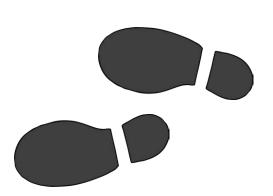
3.
$$+\frac{2}{8} = \frac{6}{8}$$

6.
$$\left[-\frac{3}{6} = \frac{2}{6} \right]$$

9.
$$+\frac{1}{3} = \frac{2}{3}$$

5	1	3	5
$\frac{5}{6}$	9	7	10
the	ten	headset	thief
2	3	1	1
3	4	6	4
age	and	female	chain
4	4	6	4
8	10	8	9
microphone	four	had	feet
6	1	3	4
7	3	8	7
curry	size	male	three

Answer:





Clue 5: Different Questions

Spell out the thief's favourite food from solving these calculations.

А	В	С	D	E	F	G	Н	I	J	K	L	М
90	28	50	16	4	24	30	100	5	25	40	55	13
N	0	Р	Q	R	S	Т	U	V	W	Х	Υ	Z
2	21	15	99	27	19	36	10	45	11	1	12	17

First word:

Number of hours in a day.

 7×3

Half of 32

Double ten, add one.

Second word:

112 - 93

Number of thirteens in sixty-five.

Third word:

The number of days in three weeks.

12 × 2

Degrees in a right angle.

The length of this line, times 3.

The number of minutes in $\frac{3}{4}$ of an hour.

The number of 20p coins which equal £2.00

40 ÷ 8

The perimeter of a rectangle with sides 12cm and 6cm long.

The number seasons.



The Mystery of the Missing Microphones

Fourth word:

100 ÷ 10

Double 25

9 × 3

XXVII

Number of edges on a cuboid

Answer:



Have you solved the mystery of the microphone and headset thief of High Brook Academy?

It is _____





The Mystery of the Missing Microphones at the End of Term Play - Answers

Clue 1: What's Your Angle?

There are more acute angles so the microphone thief wore a chain and dropped it.

Obtuse angles	acehil
Acute angles	b d f g j k m

Clue 2: Words Equal Numbers

The microphone thief was nine years of age.

51	35	67	66
was	eight	thief	male
8	502	20	363
curry	years	fish and chips	age
150	57	6	50
microphone	burger	the	shoe
28	80	353	29
size	of	ten	nine

Clue 3: Give Me More Time

There are more < signs. The thief is female.

1. =

5 >

2. <

6. <

3. >

7. <

4. >

8. <

Clue 4: Missing Factions

The microphone and headset thief had size three feet

5/6 the	1 9 ten	$\frac{\frac{3}{7}}{\text{headsets}}$	5 10 thief	
2 3 age	$\frac{\frac{3}{4}}{\text{and}}$	<u>1</u> 6 female	$rac{1}{4}$ chain	
microphones	<u>4</u> 10 four	6 8 had	4/9 feet	
6 7 curry	$\frac{1}{3}$ size	3/8 male	$\frac{\frac{4}{7}}{7}$ three	





The Mystery of the Missing Microphones at the End of Term Play - Answers

Clue 5: Different Questions

First word:

Number of hours in a day = 24

 $7 \times 3 =$ **21**

Half of 32 = 16

Double ten, add one = 21

Word: **food**

Second word:

Number of thirteens in sixty-five = 5

Word: is

Third word:

The number of days in three weeks = 21

12 × 2 = **24**

Degrees in a right angle = 90

The length of this line, times 3 = 27

The number of minutes in $\frac{3}{4}$ of an hour = 45

The number of 20p coins which equal £2.00 = 10

 $40 \div 8 = 5$

The perimeter of a rectangle with sides 12cm and 6cm long = 36

The number of seasons = 4

Word: favourite



The Mystery of the Missing Microphones at the End of Term Play - Answers

Fourth word:

Double 25 = **50**

Number of edges on a cuboid = 12

Word: **curry**

Favourite food is curry.

The thief of High Brook Academy is **Lily Leadrole!**



