## 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 | M | 9 | no | pizza | 3 |
| Brittany Bow | F | 8 | yes | curry | 2 |
| Charlie Cast | M | 9 | yes | fish and chips | 3 |
| Dylan Director | M | 10 | yes | burger | 3 |
| Eli End | M | 9 | no | fish and chips | 2 |
| Freya Footnote | F | 10 | yes | curry | 3 |
| Gurvinder Greenroom | F | 10 | yes | pizza | 2 |
| Haya Hilarious | F | 8 | yes | curry | 2 |
| Isaac Interval | M | 8 | no | burger | 2 |
| Josh Joker | M | 9 | yes | curry | 4 |
| Kayleigh Kidman | F | 10 | no | fish and chips | 3 |
| Lily Leadrole | F | 9 | yes | curry | 3 |
| Mohammed Main | M | 8 | yes | fish and chips | 2 |
| Nevin Newcomer | F | 9 | yes | pizza | 3 |
| Oscar Ovation | M | 10 | no | curry | 4 |
| Penelope Prompt | F | 10 | no | fish and chips | 4 |
| Queenie Quit | F | 8 | no | burger | 2 |
| Ruben Reynolds | M | 8 | yes | fish and chips | 2 |
| Sophia Songstress | F | 9 | yes | fish and chips | 3 |
| Thea Theatre | F | 10 | no | curry | 4 |
| Uri Understudy | M | 8 | no | pizza | 3 |
| Violet Vivacious | F | 9 | yes | pizza | 3 |
| Winston Writer | M | 10 | no | burger | 4 |
| Xanthe Xtra | F | 8 | no | pizza | 2 |
| Yang Youth | M | 9 | yes | burger | 3 |
| Zeba Zany | F | 9 | yes | burger | 3 |
| Astrid Amazing | F | 8 | no | fish and chips | 2 |
| Bilhal Better | M | 10 | yes | pizza | 4 |
| Carrie Cateur | F | 10 | yes | curry | 3 |
| Delilah Disaster | F | 9 | no | pizza | 3 |

## Clue 1: What's Your Angle?

Work out whether these angles are obtuse or acute.

| Obtuse angles |  |
| :---: | :--- |
| Acute angles |  |

a)

b)

c)

d)

e)

f)

g)

h)

i)

m)

j)

k)

l)


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 <br> eight | 67 <br> thief | 66 |
| :---: | :---: | :---: | :---: |
| 8 | 502 | 20 | male |
| curry | years | fish and chips | 363 |
| 150 | 57 | 6 | age |
| microphone | burger | the | 50 |
| 28 | 80 | 353 | shoe |
| size | of | ten | 29 |

 ten plus fiftulthree



twenty-eight

Answer:

## Clue 3: Give Me More Time

Use these signs in the empty boxes: < > =

1. 180 minutes $\square$

3 hours
2. $\frac{1}{2}$ a year $\square$ 8 months
3. 97 hours $\square$ 4 days
4. 95 minutes $\square$ $1 \frac{1}{2}$ hours
5. 22 days 3 weeks
6. 150 minutes $\square$ hours
7. $\frac{1}{3}$ of a year $\square$ 5 months
8. $\frac{3}{4}$ of an hour $\square$ 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. $\frac{1}{4}+\frac{2}{4}=\square$
2. $\frac{5}{7}-\square=\frac{2}{7}$
3. $\frac{7}{9}-\frac{3}{9}=$ $\square$
4. $\frac{9}{10}-\frac{4}{10}=$ $\square$ 5. $\frac{2}{8}+\frac{4}{8}=\square$
5. $\frac{2}{7}+\square=\frac{6}{7}$
6. $\square+\frac{2}{8}=\frac{6}{8}$
7. 


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

| $\frac{5}{6}$ <br> the | $\frac{1}{9}$ <br> ten | $\frac{3}{7}$ <br> headset | $\frac{5}{10}$ <br> thief |
| :---: | :---: | :---: | :---: |
| $\frac{2}{3}$ |  |  |  |
| age | $\frac{3}{4}$ |  |  |
| and | $\frac{1}{6}$ |  |  |
| $\frac{4}{8}$ | $\frac{4}{10}$ | female | $\frac{1}{4}$ |
| microphone | four | $\frac{6}{8}$ | chain |
| $\frac{6}{7}$ | $\frac{1}{3}$ | had | $\frac{4}{9}$ |
| curry | size | $\frac{3}{8}$ | feet |

## Answer:

$\qquad$

## Clue 5: Different Questions

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

| A | B | C | D | E | F | G | $H$ | I | J | K | L | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90 | 28 | 50 | 16 | 4 | 24 | 30 | 100 | 5 | 25 | 40 | 55 | 13 |


| $N$ | $O$ | $P$ | $Q$ | $R$ | $S$ | $T$ | $U$ | $V$ | $W$ | $X$ | $Y$ | $Z$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 21 | 15 | 99 | 27 | 19 | 36 | 10 | 45 | 11 | 1 | 12 | 17 |

First word:
Number of hours in a day.
$7 \times 3$
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.
$12 \times 2$
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 20 p coins which equal $£ 2.00$
$40 \div 8$
The perimeter of a rectangle with sides 12 cm and 6 cm long.
The number seasons.


## Fourth word:

$100 \div 10$
Double 25
$9 \times 3$
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 $\qquad$

## 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 | bdfgjkm |

Clue 2: Words Equal Numbers
The microphone thief was nine years of age.

| 51 <br> was | 35 <br> eight | 67 <br> thief | 66 <br> male |
| :---: | :---: | :---: | :---: |
| 8 <br> curry | 502 <br> years | 20 <br> fish and chips | 363 <br> age |
| 150 <br> microphone | 57 <br> burger | 6 <br> the | 50 <br> 28 <br> size |
| 80 |  |  |  |
| of |  |  |  |

Clue 3: Give Me More Time
There are more < signs. The thief is female.

1. =
2. >
3. <
4. <
5. >
6. <
7. >
8. <

Clue 4: Missing Factions
The microphone and headset thief had size three feet
\(\left.$$
\begin{array}{|c|c|c|c|}\hline \begin{array}{c}\frac{5}{6} \\
\text { the }\end{array} & \begin{array}{c}\frac{1}{9} \\
\text { ten }\end{array} & \begin{array}{c}\frac{3}{7} \\
\text { headsets }\end{array} & \begin{array}{c}\frac{5}{10} \\
\text { thief }\end{array}
$$ <br>
\hline \frac{2}{3} <br>
age \& \frac{3}{4} <br>
and \& \frac{1}{6} <br>
microphones \& \frac{4}{8} \& four \& \frac{1}{4} <br>
\hline \frac{6}{7} <br>
curry \& \frac{1}{3} \& size \& \frac{3}{8} <br>

\hline hadain\end{array}\right]\)| $\frac{4}{9}$ |
| :---: |
| feet |

Clue 5: Different Questions
First word:
Number of hours in a day $=\mathbf{2 4}$
$7 \times 3=\mathbf{2 1}$
Half of $32=\mathbf{1 6}$
Double ten, add one $=\mathbf{2 1}$
Word: food

## Second word:

$112-93=19$
Number of thirteens in sixty-five $=\mathbf{5}$
Word: is

Third word:
The number of days in three weeks $=\mathbf{2 1}$
$12 \times 2=24$
Degrees in a right angle $=\mathbf{9 0}$
The length of this line, times $3 \mathbf{= 2 7}$
The number of minutes in $\frac{3}{4}$ of an hour $=45$
The number of 20 p coins which equal $£ 2.00=\mathbf{1 0}$
$40 \div 8=5$
The perimeter of a rectangle with sides 12 cm and 6 cm long $=36$
The number of seasons $=\mathbf{4}$
Word: favourite

Fourth word:
$100 \div 10=10$
Double 25 = 50
$9 \times 3=27$
XXVII = 27
Number of edges on a cuboid $=12$
Word: curry

## Favourite food is curry.

The thief of High Brook Academy is Lily Leadrole!

