

# Robbery at the Valentine's Day Disco

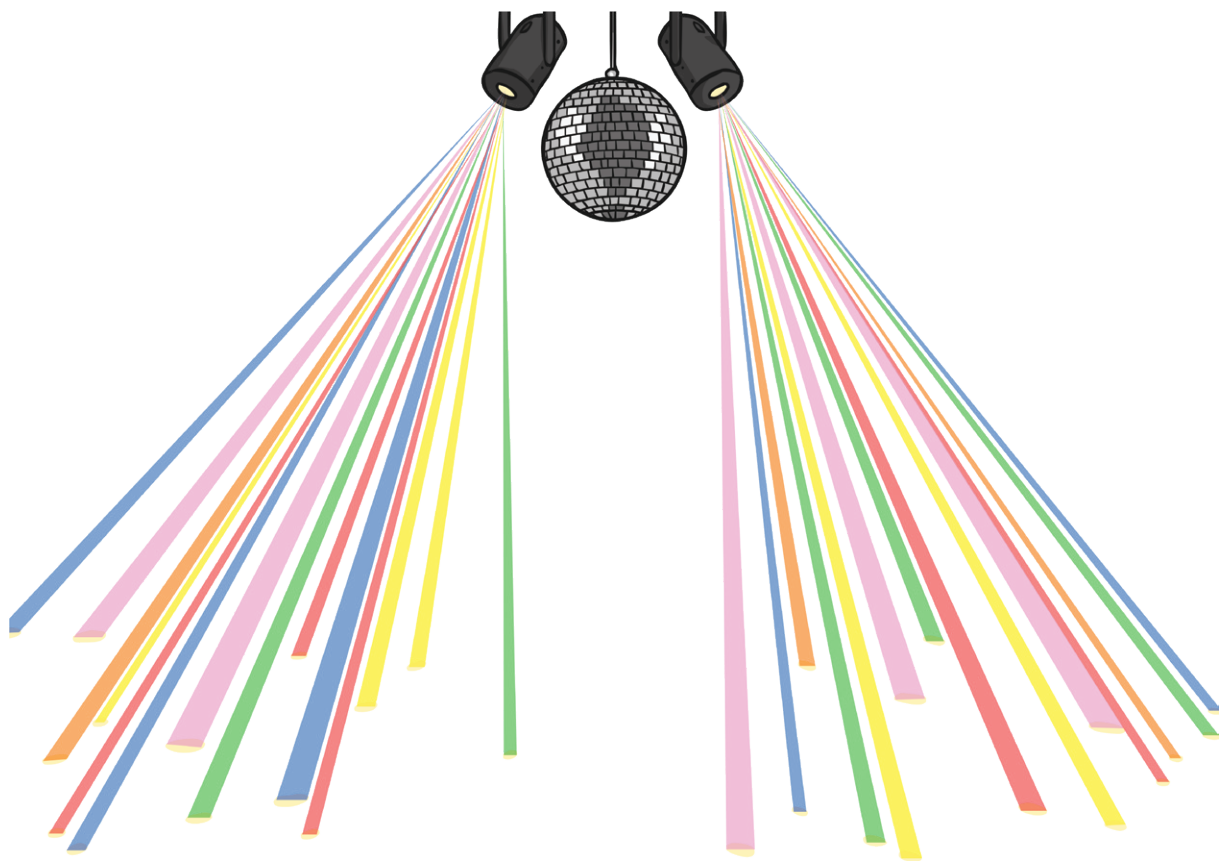
## Instructions

There has been a robbery at the Beasley Town Hall Valentine's Day disco!

A lady's brown leather handbag has been stolen from the back of a chair next to the dancefloor. It had quite a lot of money in it and an expensive mobile phone.

You are the Detective Inspector in charge of leading the investigation to discover the identity of the thief. Use the descriptions of the people still at the disco at that time and the five clues that have been discovered. You only have a short amount of time to work out who the culprit is or you're off the case!

Good luck.



| Name              | M/F | Height | Age | Hair Colour | Glasses |
|-------------------|-----|--------|-----|-------------|---------|
| Carrie Jones      | F   | tall   | 27  | blonde      | N       |
| Michael Timms     | M   | tall   | 30  | black       | N       |
| Jessie Mayer      | F   | short  | 41  | blonde      | Y       |
| Jake Peters       | M   | tall   | 35  | blonde      | N       |
| Josh McArdle      | M   | short  | 23  | brown       | Y       |
| Symmon Ying       | M   | tall   | 26  | black       | Y       |
| Simone Beaumont   | F   | short  | 28  | brown       | Y       |
| Sally Forth       | F   | short  | 40  | brown       | N       |
| Frankie Brown     | M   | tall   | 31  | black       | Y       |
| Kim West          | F   | tall   | 28  | blonde      | N       |
| Heather Green     | F   | tall   | 25  | blonde      | N       |
| Ben Towers        | M   | short  | 19  | black       | Y       |
| David Langston    | M   | short  | 29  | blonde      | N       |
| Sean Clemson      | M   | tall   | 43  | black       | Y       |
| Phillipa Till     | F   | short  | 28  | blonde      | N       |
| Adam Tern         | M   | short  | 31  | black       | N       |
| John Bank         | M   | tall   | 42  | brown       | N       |
| Hannah Post       | F   | short  | 39  | black       | N       |
| Ella Mason        | F   | tall   | 40  | blonde      | N       |
| Hamish McEwan     | M   | tall   | 38  | brown       | Y       |
| Beth Swift        | F   | tall   | 32  | blonde      | N       |
| Grace Kean        | F   | short  | 42  | brown       | Y       |
| Mackenzie Pierce  | M   | tall   | 31  | black       | Y       |
| River Hayes       | M   | short  | 30  | brown       | Y       |
| Hollie Frasier    | F   | tall   | 45  | black       | Y       |
| Iona Ford         | M   | short  | 44  | brown       | N       |
| Stewart Jessop    | M   | tall   | 40  | blonde      | N       |
| Halima Singh      | F   | short  | 35  | black       | N       |
| Annika Bauer      | F   | tall   | 30  | blonde      | N       |
| Steve Thompson    | M   | short  | 35  | black       | Y       |
| Lily Garrick      | F   | tall   | 41  | brown       | N       |
| Harriet Cresswell | F   | short  | 35  | blonde      | Y       |

## Clue 1 Right or Wrong

Here is a list of different calculations which you need to check.

If there are more incorrect than correct, the robber is male.

$$3030 \div 10 = 303$$

$$811 \div 100 = 8.11$$

$$4.8 \times 100 = 480$$

$$2292 \div 6 = 1282$$

$$7.2 \times 100 = 0.72$$

$$7650 \div 10 = 765$$

$$3.12 \times 10 = 312$$

$$12.5 \times 10 = 125$$

$$1944 \div 3 = 648$$

$$2.06 \times 100 = 2006$$

$$95 \div 10 = 9.5$$

$$1230 \times 3 = 3660$$

$$4851 \div 9 = 529$$

$$3660 \div 6 = 610$$

$$6.5 \times 10 = 0.65$$

$$297 \times 3 = 891$$

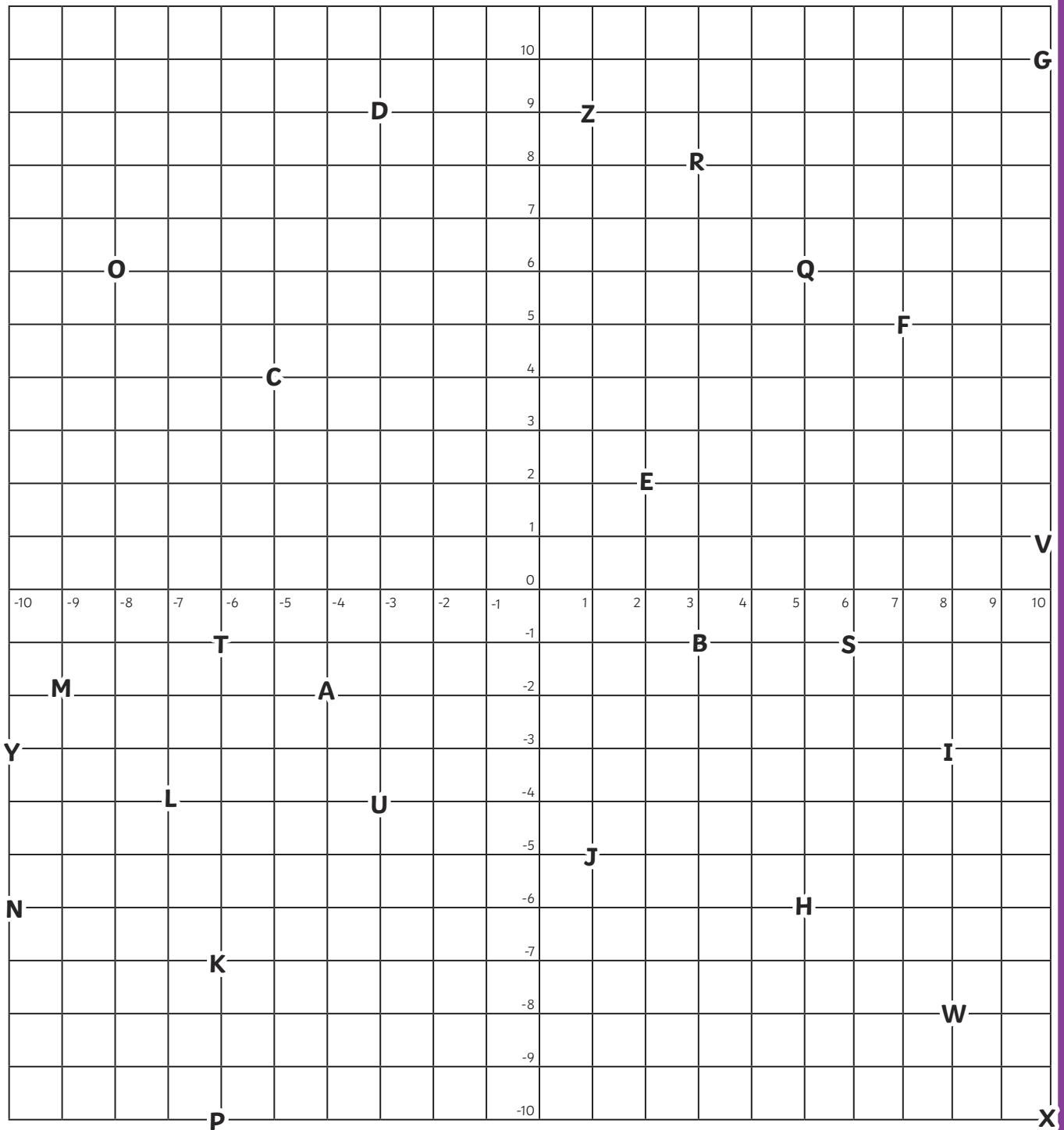
Clue: Circle the correct letter.

The robber is    M    or    F



## Clue 2 How Do You Measure Up?

Look at the coordinates on the following page. Find the coordinates on the graph. Each set of coordinates will reveal a word. Once you have worked out all of the words, the second clue will be revealed.



## Clue 2 How Do You Measure Up?

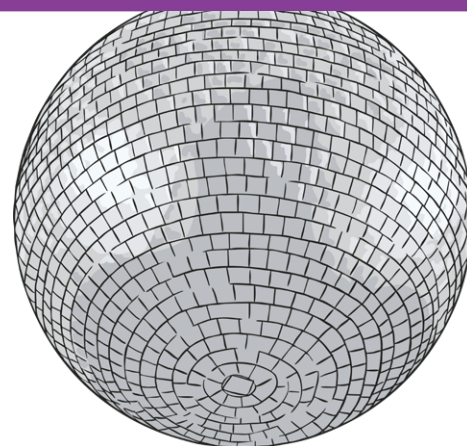
$(-6,-1)$   $(5,-6)$   $(2,2)$  /  $(3,8)$   $(-8,6)$   $(3,-1)$   $(3,-1)$   $(2,2)$   $(3,8)$  /

$(8,-8)$   $(-4,-2)$   $(6,-1)$  /  $(-10,-6)$   $(-8,6)$   $(-6,-1)$  /  $(-4,-2)$  /

$(-6,-1)$   $(-4,-2)$   $(-7,-4)$   $(-7,-4)$  /  $(-6,-10)$   $(2,2)$   $(3,8)$   $(6,-1)$   $(-8,6)$   $(-10,-6)$

Clue: \_\_\_\_\_





### Clue 3 Keep it Simple

| A              | B              | C              | D              | E              | F             | G              | H              | I              | J              | K              | L             | M              |
|----------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|
| $\frac{7}{10}$ | $\frac{4}{9}$  | $\frac{2}{9}$  | $\frac{2}{15}$ | $\frac{2}{24}$ | $\frac{1}{3}$ | $\frac{3}{35}$ | $\frac{7}{12}$ | $\frac{5}{8}$  | $\frac{1}{16}$ | $\frac{2}{18}$ | $\frac{3}{5}$ | $\frac{9}{10}$ |
| N              | O              | P              | Q              | R              | S             | T              | U              | V              | W              | X              | Y             | Z              |
| $\frac{2}{3}$  | $\frac{3}{11}$ | $\frac{1}{17}$ | $\frac{2}{8}$  | $\frac{4}{7}$  | $\frac{3}{8}$ | $\frac{4}{12}$ | $\frac{8}{16}$ | $\frac{5}{10}$ | $\frac{3}{4}$  | $\frac{1}{15}$ | $\frac{7}{8}$ | $\frac{5}{20}$ |

Simplify these fractions as far as you can and find the correct fraction in the table above. Spell out the words to solve the clue.

First word:  $\frac{14}{24}$   $\frac{21}{30}$   $\frac{25}{40}$   $\frac{16}{28}$

Second word:  $\frac{25}{40}$   $\frac{24}{64}$

Third word:  $\frac{36}{81}$   $\frac{16}{28}$   $\frac{36}{132}$   $\frac{18}{24}$   $\frac{32}{48}$

Clue: \_\_\_\_\_

## Clue 4 Can you find it?

The equation to find the perimeter of a rectangle is  $P = 2l + 2w$

Fill in the missing answers and find the corresponding word in the table below to solve the clue.

| Length (cm) | Width (cm) | Perimeter (cm) |
|-------------|------------|----------------|
| 2           | 4          |                |
| 6           | 10         |                |
|             | 8          | 44             |
| 21          | 16         |                |
| 26          |            | 136            |
|             | 48         | 168            |

|               |             |              |             |
|---------------|-------------|--------------|-------------|
| 36<br>glasses | 8<br>had    | 12<br>robber | 22<br>bag   |
| 28<br>lost    | 17<br>forty | 100<br>stole | 32<br>case  |
| 84<br>male    | 14<br>the   | 3<br>tall    | 40<br>found |
| 73<br>some    | 65<br>aged  | 58<br>in     | 74<br>had   |
| 42<br>a       | 39<br>park  | 18<br>before | 27<br>coat  |

Clue: \_\_\_\_\_

## Clue 5 What Decade?

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 22       | 105      | 30       | 6        | 49       | 25       | 14       | 82       | 64       | 94       | 2        | 19       | 7        |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 11       | 100      | 115      | 303      | 4        | 1        | 81       | 12       | 28       | 55       | 76       | 26       | 50       |

Identify all the square numbers in the chart.

Use the letters to work out which decade the age of the robber was.

Clue: \_\_\_\_\_

The robber of the Valentine's Day disco is \_\_\_\_\_

# Answers

| Question                              | Answer            |       |       |        |        |        |       |       |  |
|---------------------------------------|-------------------|-------|-------|--------|--------|--------|-------|-------|--|
| Clue 1 Right or Wrong                 |                   |       |       |        |        |        |       |       |  |
|                                       | 3030 ÷ 10 = 303   |       |       |        |        |        |       |       |  |
|                                       | 4.8 × 100 = 480   |       |       |        |        |        |       |       |  |
| X                                     | 7.2 × 100 = 0.72  |       |       |        |        |        | 720   |       |  |
| X                                     | 3.12 × 10 = 312   |       |       |        |        |        | 31.2  |       |  |
|                                       | 1944 ÷ 3 = 648    |       |       |        |        |        |       |       |  |
|                                       | 95 ÷ 10 = 9.5     |       |       |        |        |        |       |       |  |
| X                                     | 4851 ÷ 9 = 529    |       |       |        |        |        | 539   |       |  |
| X                                     | 6.5 × 10 = 0.65   |       |       |        |        |        | 65    |       |  |
|                                       | 811 ÷ 100 = 8.11  |       |       |        |        |        |       |       |  |
| X                                     | 2292 ÷ 6 = 1282   |       |       |        |        |        | 382   |       |  |
|                                       | 7650 ÷ 10 = 765   |       |       |        |        |        |       |       |  |
|                                       | 12.5 × 10 = 125   |       |       |        |        |        |       |       |  |
| X                                     | 2.06 × 100 = 2006 |       |       |        |        |        | 206   |       |  |
| X                                     | 1230 × 3 = 3660   |       |       |        |        |        | 3690  |       |  |
|                                       | 3660 ÷ 6 = 610    |       |       |        |        |        |       |       |  |
|                                       | 297 x 3 = 891     |       |       |        |        |        |       |       |  |
| The robber is M or F. Circle around F |                   |       |       |        |        |        |       |       |  |
| Clue 2 How Do You Measure Up?         |                   |       |       |        |        |        |       |       |  |
| (-6,-1)                               | (5,-6)            | (2,2) | (3,8) | (-8,6) | (-8,6) | (3,-1) | (2,2) | (3,8) |  |
| T                                     | H                 | E     | R     | O      | B      | B      | E     | R     |  |

| Question                                                                                                     |         |         | Answer     |          |         |                |        |        |          |
|--------------------------------------------------------------------------------------------------------------|---------|---------|------------|----------|---------|----------------|--------|--------|----------|
| (8,-8)                                                                                                       | (-4,-2) | (6,-1)  | (-10,-6)   | (-8,6)   | (-6,-1) | (-4,-2)        |        |        |          |
| W                                                                                                            | A       | S       | N          | O        | T       | A              |        |        |          |
| (-6,-1)                                                                                                      | (-4,-2) | (-7,-4) | (-7,-4)    | (-6,-10) | (2,2)   | (3,8)          | (6,-1) | (-8,6) | (-10,-6) |
| T                                                                                                            | A       | L       | L          | P        | E       | R              | S      | O      | N        |
| 4/12                      7/21                      6/18                      5/15                      8/24 |         |         |            |          |         |                |        |        |          |
| Clue: The robber was not a tall person.                                                                      |         |         |            |          |         |                |        |        |          |
| Clue 3 Keep it Simple                                                                                        |         |         |            |          |         |                |        |        |          |
| First word:                                                                                                  |         | 14/24   | 21/30      | 25/40    | 16/28   |                |        |        |          |
|                                                                                                              |         | H       | A          | I        | R       |                |        |        |          |
| Second word:                                                                                                 |         | 25/40   | 24/64      |          |         |                |        |        |          |
|                                                                                                              |         | I       | S          |          |         |                |        |        |          |
| Third word:                                                                                                  |         | 36/81   | 16/28      | 36/132   | 18/24   | 32/48          |        |        |          |
|                                                                                                              |         | B       | R          | O        | W       | N              |        |        |          |
| Clue: Hair is brown.                                                                                         |         |         |            |          |         |                |        |        |          |
| Length (cm)                                                                                                  |         |         | Width (cm) |          |         | Perimeter (cm) |        |        |          |
| 2                                                                                                            |         |         | 4          |          |         | 12             |        |        |          |
| 6                                                                                                            |         |         | 10         |          |         | 32             |        |        |          |
| 14                                                                                                           |         |         | 8          |          |         | 44             |        |        |          |
| 21                                                                                                           |         |         | 16         |          |         | 74             |        |        |          |
| 26                                                                                                           |         |         | 42         |          |         | 136            |        |        |          |
| 36                                                                                                           |         |         | 48         |          |         | 168            |        |        |          |
| Clue: The robber had a glasses case.                                                                         |         |         |            |          |         |                |        |        |          |
| Clue 5 What Decade?                                                                                          |         |         |            |          |         |                |        |        |          |
| E                                                                                                            | F       | I       | O          | R        | S       | T              |        |        |          |
| 49                                                                                                           | 25      | 64      | 100        | 4        | 1       | 81             |        |        |          |
| Clue: Forties                                                                                                |         |         |            |          |         |                |        |        |          |
| The robber of the Valentine's Day disco was Grace Kean.                                                      |         |         |            |          |         |                |        |        |          |