## Mystery at Eagleton Castle Maths Game

It's the most awaited day of the year for the pupils of St. Owlson Academy. The Year 4 class is going to Eagleton Castle for their school trip and they cannot wait!

They have everything they need and are eager to get on the coach and get going! The teachers are very relieved when they finally arrive, get parked and head for the castle entrance.

Everyone is repeatedly counted and finally they are allowed into the castle grounds. The children already know which group they are in and gather together.

They spend the morning looking around the castle kitchen, making bread, visiting the scary dungeons and making each other jump in the Haunted Tower.

But disaster has struck! Someone has sneaked away to the birds of prey enclosure. Each bird is kept in its own hutch. What's that? All the doors to the hutches are open! All the birds of prey have flown away!

It is your job to use the suspects' descriptions and solve the maths clues to identify the mystery birds-of-prey releaser. Good luck!


## Descriptions of Suspects

| Name | M/F | Height cm | Eye colour | Group | Dominant hand |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Yamen Yellowtail | M | 138 | green | vulture | right |
| Willliam Waxwing | M | 143 | blue | harrier | left |
| Tia Teal | F | 137 | brown | vulture | left |
| Sara Skylark | F | 141 | blue | hawk | right |
| Sean Serin | M | 138 | blue | harrier | right |
| Rayyan Razorbill | M | 148 | brown | hawk | right |
| Rea Raven | F | 137 | blue | eagle | right |
| Quentin Quail | M | 138 | blue | eagle | right |
| Phil Pheasant | M | 143 | blue | hawk | right |
| Paulina Puffin | F | 137 | brown | eagle | right |
| Oliver Ospray | M | 138 | green | vulture | left |
| Ola Oystercatcher | F | 143 | blue | harrier | right |
| Nina Nightingale | F | 132 | brown | vulture | left |
| Nizar Nuthatch | M | 138 | hazel | hawk | right |
| Marcel Mallard | M | 138 | blue | harrier | right |
| Mollie Merlin | F | 132 | brown | harrier | left |
| Laiba Linnet | F | 137 | brown | eagle | right |
| Liam Lapwing | M | 132 | blue | vulture | right |
| Jian Jay | M | M | 126 | brown | hawk |

## Clue 1: To Meet or Not to Meet?

Here are some 2D shapes. Add together the number of pairs of parallel lines in each row of shapes. Then, find the answers in the table below to solve the first clue.


## Clue 1: To Meet or Not to Meet?

| 3 pairs is | 0 pairs male | 2 pairs <br> culprit |
| :---: | :---: | :---: |
| 6 pairs hawk | 1 pair the | 5 pairs not |
| 4 pairs <br> female | 7 pairs height | 8 pairs blue |

Answer to clue 1:

## Clue 2: Dungeon Code

To solve clue number two, crack the code to the dungeon and see what you can find. Work out the calculations and colour in the answers in the table below. Rearrange the letters to spell out the answer to the second clue.

$$
\begin{array}{lllll}
120+40 & 139-20 & 704+50 & 912-50 \\
329+100 & 333-100 & 518+30 & 602-60 & 288+50
\end{array}
$$

| 548 | 109 | 542 |
| :---: | :---: | :---: |
| 0 | G | N |
| 618 | 160 | 552 |
| U | Y | L |
| 119 | 203 | 170 |
| R | H | A |
| 532 | 429 | 754 |
| B | B | E |
| 862 | 891 | 662 |
| E | Z | P |
| 188 | 338 | 233 |
| M | S | W |

Answer to clue 2:

## Clue 3: Through the Spooky Forest

While on the castle trip, the children go on a trail through the Spooky Forest.
Follow the calculation pathway to find out the height of the culprit.


## Clue 4: Unlock the Tower

The knight, Sir Rebral, must solve the direction puzzles if he is to find the princess locked in the tower.

Help him work out the puzzles, to solve the clue.


## Clue 4: Unlock the Tower



Highlight the correct answer to solve clue 4.

| I answered east, twice. | The culprit is in vulture group. |
| :---: | :---: |
| I answered south, twice. | The culprit is in eagle group. |
| I answered north, twice. | The culprit is in harrier group. |
| I answered west, twice. | The culprit is in hawk group. |

## Clue 5: Give Them a Hand

Fingerprints were discovered on the handles of the hutches where the birds of prey were kept. Solve the clues describing 3D shapes to work out whether the culprit was left or right handed.

I have 6 flat faces, 12 flat edges and 8 vertices. All my faces are the same size. My word is $\qquad$ .

I have 1 curved surface, no vertices and no edges. My word is $\qquad$ .

I have 1 curved surface, 2 flat surfaces, and 2 curved edges. My word is $\qquad$ .

I have 5 flat surfaces, 8 flat edges and 5 vertices. My word is $\qquad$ .

I have one curved surface, 1 flat surface which is a circle, and 1 curved edge. I have no vertices. My word is $\qquad$ .
culs,

Answer to clue 5: $\qquad$
Have you solved the mystery of who released the birds of prey at Eagleton Castle?
It was $\qquad$ .

Clue 1: To Meet or Not to Meet?
Answers

| 3 pairs <br> is | 0 pairs <br> male | 2 pairs <br> culprit |
| :---: | :---: | :---: |
| 6 pairs <br> hawk | 1 pair <br> the | 5 pairs <br> not |
| 4 pairs <br> female | 7 pairs <br> height | 8 pairs <br> blue |

Answer: THE CULPRIT IS FEMALE

## Clue 2: Dungeon Code Answers

| $\begin{gathered} 548 \\ 0 \end{gathered}$ | $\begin{gathered} 109 \\ G \end{gathered}$ | $\begin{gathered} 542 \\ \mathrm{~N} \end{gathered}$ |
| :---: | :---: | :---: |
| $\begin{gathered} 618 \\ U \end{gathered}$ | $\begin{gathered} 160 \\ Y \end{gathered}$ | $\begin{gathered} 552 \\ L \end{gathered}$ |
| $\begin{gathered} 119 \\ R \end{gathered}$ | $\begin{gathered} 203 \\ H \end{gathered}$ | $\begin{gathered} 170 \\ \mathrm{~A} \end{gathered}$ |
| $\begin{gathered} 532 \\ \text { B } \end{gathered}$ | $\begin{gathered} 429 \\ B \end{gathered}$ | $\begin{gathered} 754 \\ E \end{gathered}$ |
| $\begin{gathered} 862 \\ E \end{gathered}$ | $\begin{gathered} 891 \\ \text { Z } \end{gathered}$ | $\begin{gathered} 662 \\ P \end{gathered}$ |
| $\begin{gathered} 188 \\ \mathrm{M} \end{gathered}$ | $\begin{gathered} 338 \\ S \end{gathered}$ | $\begin{gathered} 233 \\ W \end{gathered}$ |

Answer: BROWN EYES

Clue 3: Through the Spooky Forest Answers
$1042+100=1142,+10=1152,-200=952,-900=52,+4=56, \div 8=7, \times 10=70$, double = 140, -3 = 137

## Answer: The culprit is 137 cm tall.

## Clue 4: Unlock the Tower Answers

1. If I am facing north and I turn clockwise one right angle, which direction will I be facing? east
2. If I am facing west and I make a 90 degree turn anticlockwise, which direction will I be facing now?
south
3. If I am facing west and I turn three right angles clockwise, which direction will I be facing?
south
4. If I am facing north and turn 360 degrees, which direction will I be facing? north
5. If I am facing east and I turn 90 degrees anticlockwise, which direction will I be facing? north
6. If I am facing east and I turn 180 degrees, which direction will I be facing? west
7. If I am facing south and I make two right angle turns, which direction will I be facing? north

Answer: I answered south twice. The culprit is in eagle group.

## Clue 5: Give Them a Hand Answers

1. I have 6 flat faces, 12 flat edges and 8 vertices. All my faces are the same size. I am a cube.
2. I have 1 curved surface, no vertices and no edges. I am a sphere.
3. I have 1 curved surface, 2 flat surfaces, and 2 curved edges. I am a cylinder.
4. I have 5 flat surfaces, 8 flat edges and 5 vertices. I am a square based pyramid.
5. I have one curved surface, 1 flat surface which is a circle, and 1 curved edge. I have no vertices. I am a cone.

Clue 5: Give Them a Hand Answers
culprit

## THE CULPRIT IS LEFT HANDED.

The person who released the birds of prey at Eagleton Castle was Dina Dipper.

