## The Place Value Mystery in the Palace Kitchen Maths Game

Mr Bun, the royal baker, bakes for the queen. He usually loves his job but today he is having a dreadful morning. First of all, his alarm didn't go off so he was late getting up to bake the bread. Then, the cat made him jump and he dropped the bag of flour which went absolutely everywhere. To top it all off, someone has sneaked in and bitten one leg off all the gingerbread men that he has made.

Who could the secret nibbler be?
Your task is to use the descriptions of the suspects and solve the clues to work out who the culprit is!

Good luck!


| Name | M/F | Job at the Palace | Wears gloves | Hair Colour | Height |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amy | female | maid | yes | dark | tall |
| Bertie | male | butler | yes | dark | tall |
| Cora | female | kitchen hand | no | light | short |
| Devindra | male | footman | yes | dark | short |
| Elliot | male | butler | yes | light | tall |
| Frances | female | maid | yes | dark | tall |
| Grant | male | kitchen hand | no | dark | short |
| Himmat | female | maid | yes | dark | tall |
| Isaiah | male | kitchen hand | no | light | tall |
| Jessie | female | maid | yes | light | short |
| Kristoff | male | footman | yes | dark | tall |
| Liam | male | butler | yes | dark | short |
| Mia | female | maid | no | light | tall |
| Nathanial | male | footman | yes | dark | short |
| Ophelia | female | kitchen hand | no | light | tall |
| Piotr | male | footman | yes | light | short |
| Quentin | male | butler | yes | dark | short |
| Rhys | male | butler | yes | dark | tall |
| Sara | female | kitchen hand | no | dark | tall |
| Trev | male | butler | yes | light | short |
| Una | female | maid | yes | dark | tall |
| Vince | male | footman | yes | dark | tall |
| William | male | footman | yes | light | short |
| Xavier | male | footman | yes | dark | tall |
| Yan | female | maid | yes | dark | short |

## Clue 1 界 <br> Complete the Sequence

Count on in steps of two and complete the number sequence.
(0)



Count on in steps of three and complete the number sequence.


Count on in steps of five and complete the number sequence.


Count on in tens and complete the number sequence.




Count on in twos and complete the number sequence.
(10)


Count on in tens and complete the number sequence.
23


Find the numbers you have written on the gingerbread men.
Use the words from the table to make a sentence to solve the first clue.

| $\begin{gathered} 21 \\ \text { tall } \end{gathered}$ | $\begin{aligned} & 80 \\ & \text { the } \end{aligned}$ | $\begin{gathered} 20 \\ \text { under } \end{gathered}$ |
| :---: | :---: | :---: |
| 73 | 18 | 30 |
| light | gingerbread | hair |
| 22 | 12 | 83 |
| has | nibbler | dark |

Answer to clue 1: $\qquad$

## $\%^{\text {Clue } 2}$ 肴 Counting On

Work out which numbers are represented in these pictures then find the answers in the table. Use the words in the table to solve clue number two.

| 30 <br> hat | 13 <br> beside | 48 <br> dropped |
| :---: | :---: | :---: |
| 59 <br> was | 62 <br> short | 64 |
| 22 | 17 |  |
| baking | glove | 14 |
| 71 | 49 |  |
| $a$ | found | tall |



Answer to clue 2: $\qquad$

## $\%^{\text {P }}$ Clue 3 最 <br> Hat Match!

Match up the gingerbread men with the hats.
Use the words in the hats to make a sentence to solve the third clue.


Answer to clue 3: $\qquad$

## Clue 4 io <br> More or Less

Write the answers in the empty chefs' hats and find the answer in the table.

1 more than 17 is


1 less than 12 is


1 more than 23 is


1 less than 15 is


1 more than 8 is


1 less than 27 is


| 14 <br> nibbler | 16 <br> kitchen hand | 26 <br> maid |
| :---: | :---: | :---: |
| 25 <br> footman | 18 <br> is | 13 <br> butler |
| 11 |  |  |
| $a$ |  |  | | 9 |
| :---: |
| gingerbread |$\quad$| 24 |
| :---: |
| the |

Answer to clue 4: $\qquad$

## $\%^{\text {Clue }} 5$ <br> Order Up!

Order these sets of numbers from the smallest to the largest.


| $13,17,20$ <br> is | $19,25,31$ <br> gingerbread | $1,2,3$ <br> before | $8,6,3$ <br> could |
| :---: | :---: | :---: | :---: |
| $17,10,13$ <br> not | $2,5,9$ <br> the | $10,16,18$ <br> short | $31,25,19$ <br> dropped |
| $18,10,16$ <br> tall | $22,33,44$ <br> sorry | $3,6,8$ <br> nibbler | $9,2,5$ <br> footman |

Answer to clue 5: $\qquad$
Have you solved the mystery at the palace? Who ate the gingerbread?

## Clue 1: Compete the Sequence

| $\begin{gathered} 21 \\ \text { tall } \end{gathered}$ | $\begin{aligned} & 80 \\ & \text { the } \end{aligned}$ | $\begin{gathered} 20 \\ \text { under } \end{gathered}$ |
| :---: | :---: | :---: |
| $\begin{gathered} \hline 73 \\ \text { light } \end{gathered}$ | $18$ <br> gingerbread | $\begin{gathered} 30 \\ \text { hair } \end{gathered}$ |
| $\begin{gathered} 22 \\ \text { has } \end{gathered}$ | $\begin{gathered} 12 \\ \text { nibbler } \end{gathered}$ | $\begin{gathered} 83 \\ \text { dark } \end{gathered}$ |

Answer to clue 1: The gingerbread nibbler has dark hair.

## Clue 2: Counting on

| 30 <br> hat | 13 <br> beside | 48 <br> dropped |
| :---: | :---: | :---: |
| 59 | 62 <br> was | 64 <br> shart |
| 22 | glove | 17 |
| baking | 49 | tall |
| 71 | found | 35 |
| $\mathbf{a}$ | the |  |

Answer to clue 2: A glove was dropped beside the baking trays.

## Clue 3: Hat Match!

Answer to clue 3: The gingerbread nibbler is female.

## Clue 4: More or Less

| 14 <br> nibbler | 16 <br> kitchen hand | 26 <br> maid |
| :---: | :---: | :---: |
| 25 | 18 |  |
| footman | is | 13 |
| 11 | 9 |  |
| a |  |  |

Answer to clue 4: The gingerbread nibbler is a maid.

## Clue 5: Order Up!

| $13,17,20$ <br> is | $19,25,31$ <br> gingerbread | $1,2,3$ <br> before | $8,6,3$ <br> could |
| :---: | :---: | :---: | :---: |
| $17,10,13$ <br> not | $2,5,9$ <br> the | $10,16,18$ <br> short | $31,25,19$ <br> dropped |
| $18,10,16$ <br> tall | $22,33,44$ <br> sorry | $3,6,8$ <br> nibbler | $9,2,5$ <br> footman |

Answer to clue 5: The gingerbread nibbler is short

Have you solved the mystery at the palace? Who ate the gingerbread?
Yan is the palace gingerbread eater!

