## חHMERALY

ACCESS MATHS

First verse:
On the first day of Christmas, my true love sent to me A partridge in a pear tree.

Last verse

## How many gifts did my true love send to me altogether?

On the twelfth day of Christmas,
my true love sent to me
Twelve lords a-leaping, Eleven ladies dancing, Ten pipers piping, Nine drummers drumming, Eight maids a-milking, Seven swans a-swimming, Six geese a-laying, Five golden rings, Four calling birds, Three French hens, Two turtle doves, And a partridge in a pear tree!

There are 12 verses altogether.

## חUMERALY

What are the values of each of the Christmas items?
Christmas Trivia £375,000
What is the question?


|  |
| :---: |
| 颳 6 |

# ПUПЕЕРА <br> CHALLETIE LEVEL 1 

First verse:
On the first day of Christmas, my true love sent to me A partridge in a pear tree.

## Last verse

On the twelfth day of Christmas, my true love sent to me Twelve lords a-leaping, Eleven ladies dancing, Ten pipers piping, Nine drummers drumming, Eight maids a-milking, Seven swans a-swimming, Six geese a-laying, Five golden rings, Four calling birds, Three French hens, Two turtle doves, And a partridge in a pear tree!

There are 12 verses altogether.

## ПUПЕЕРАСY CHALLETIE LEVEL 1

## First verse:

On the first day of Christmas, my true love sent to me
A partridge in a pear tree.


## Last verse

On the twelfth day of Christmas, my true love sent to me
Twelve lords a-leaping, Eleven ladies dancing, Ten pipers piping, Nine drummers drumming, Eight maids a-milking, Seven swans a-swimming, Six geese a-laying, Five golden rings, Four calling birds, Three French hens, Two turtle doves, And a partridge in a pear tree!

There are 12 verses altogether.

## ПUПЕРАГY CHALLETGE LEVEL 2

What are the values of each of the Christmas items?

|  | $\varepsilon$ |  |  |
| :---: | :---: | :---: | :---: |
| $\dot{B}^{2}$ |  |  | 1 |
| Eis | \& | $\overbrace{6}$ | 15 |
| 9 | 21 | 18 |  |

## ПЦППЕРАГY CHALLETIE LEVEL ᄅ

What are the values of each of the Christmas items?


## LEVEL 1

One way to interpret the lyrics of this song is that on each new day, all the gifts are given.

This makes the total number of gifts given (counting 12 partridges, 22 turtle doves...) equal to 364. One fewer than the number of days in a year.

There are 376 gifts if you count the pear tree as a separate gift from the partridge that resides in it.

Of the 364 total items, 184 of them are birds.
Overall, 364 presents!!

## LEVEL 2

What's most interesting about this puzzle is students first steps.

The top row and left column show that swapping out a tree for a snowman halves the total. There are no combinations of numbers that work in these combinations unless the snowman is worth zero!

The snowman is therefore worth 0 , meaning the tree is worth 9 and the star is worth 6 .


## Christmas Trivia

## Christmas Trivia

## What is the question?

## £375,000

The amount that Mariah Carey makes per year from All I Want For Christmas. The Pogues make about $£ 400,000$ from Fairytale of New York and Slade are reckoned to earn £500,000 per year from Merry Christmas Everybody

