



The 12 Days of Christmas

Here's a little problem to get your grey cells jumping!

Calculate the total number of gifts sent during the 12 days of Christmas.

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

On the second day of Christmas, my true love sent to me two turtledoves, and a partridge in a pear tree.

On the third day of Christmas, my true love sent to me Three French hens, two turtledoves and a partridge in a pear tree.

On the fourth day of Christmas, my true love sent to me four calling birds...

On the fifth day of Christmas, my true love sent to me five golden rings...

On the sixth day of Christmas, my true love sent to me six geese a-laying...

On the seventh day of Christmas, my true love sent to me seven swans a-swimming...

On the eighth day of Christmas, my true love sent to me eight maids a-milking...

On the ninth day of Christmas, my true love sent to me nine ladies dancing...

On the tenth day of Christmas, my true love sent to me ten lords a-leaping...

On the eleventh day of Christmas, my true love sent to me eleven pipers piping...

On the twelfth day of Christmas, my true love sent to me twelve drummers drumming...

Your answer:

The 12 Days of Christmas

Extension work

These questions are based on the answers to the question on page 1.

	Question	Answer
1.	In your calculation how many partridges were delivered?	
2.	How many gold rings were received over the 12 days?	
3.	How many more pipers were received than drummers?	
4.	Were more swans a-swimming received than geese a-laying?	
5.	If the current cost of a French hen is €15.00 how much has been spent on all the French hens? Round your answer to the nearest 10 Euros	
6.	If each lord can leap 5 metres, what is the total distance all the lords leapt?	
7.	If the average turtle dove weighs 150 grams, what is the total weight of the turtle doves? Give your answer in kilograms	
8.	If each milking maid can extract 8 pints, how many gallons were collected altogether? (1 gallon = 8 pints)	
9.	If the average calling bird can eat 10 grams of bird seed a day, how much bird seed is eaten over all the days that calling birds were delivered?	
10.	The average wing span of a partridge is 46 cm. What is the combined wingspan of all the partridges delivered over the 12 days of Christmas?	
11.	If each dancing lady needs a floor space of 16 m ² in which to comfortably dance, what is the total floor space needed to accommodate all the dancing ladies?	
12.	Using your answer to question 8, if the current price of "this is not just a pint of milk, this is a pint of rich, creamy, deliciously tasty, hand squeezed organic milk" is 53 pence, how much would I have to pay for all the milk produced?	



The 12 Days of Christmas - **Answers**

The table below shows the total numbers of each gift.

Gift	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Total
Partridge	1	1	1	1	1	1	1	1	1	1	1	1	12
Turtle Doves		2	2	2	2	2	2	2	2	2	2	2	22
French Hens			3	3	3	3	3	3	3	3	3	3	30
Calling Birds				4	4	4	4	4	4	4	4	4	36
Gold Rings					5	5	5	5	5	5	5	5	40
Geese						6	6	6	6	6	6	6	42
Swans							7	7	7	7	7	7	42
Maids								8	8	8	8	8	40
Ladies									9	9	9	9	36
Lords										10	10	10	30
Pipers											11	11	22
Drummers												12	12
Totals	1	3	6	10	15	21	28	36	45	55	66	78	364

There you go - 364 gifts in total, and enough pear trees to start an orchard!

Skills used in this problem include addition, number sequencing, multiplication and data handling (extracting information).

The 12 Days of Christmas - Answers

	Question	Answer
1.	In your calculation, how many partridges were delivered?	12
2.	How many gold rings were received over the 12 days?	40
3.	How many more pipers were received than drummers?	10 (22 - 12)
4.	Were more swans a-swimming received than geese a-laying?	No it's the same number (42)
5.	If the current cost of a French hen is €15.00 how much has been spent on all the French hens? Round your answer to the nearest 10 Euros	€15 × 30 = €450; this is rounded! Trick question.
6.	If each lord can leap 5 metres, what is the total distance all the lords leapt?	30 × 5 = 150 m
7.	If the average turtle dove weighs 150 grams, what is the total weight of the turtle doves? Give your answer in kilograms	22 × 150 = 3300 grams = 3.3 Kg
8.	If each milking maid can extract 8 pints, how many gallons were collected altogether? (1 gallon = 8 pints)	40 gallons
9.	If the average calling bird can eat 10 grams of bird seed a day, how much bird seed is eaten over all the days that calling birds were delivered?	1,800 grams *
10.	The average wing span of a partridge is 46 cm. What is the combined wingspan of all the partridges delivered over the 12 days of Christmas?	12 × 46 = 552 cm or 5.52 m
11.	If each dancing lady needs a floor space of 16 m ² in which to comfortably dance, what is the total floor space needed to accommodate all the dancing ladies?	16 × 36 = 576 m ²
12.	Using your answer to question 8, if the current price of "this is not just a pint of milk, this is a pint of rich, creamy, deliciously tasty, hand squeezed organic milk" is 53 pence, how much would I have to pay for all the milk produced?	40 × 8 × £0.53 =£169.60

* Note that on Day 4, the first calling birds are delivered and they will need feeding up to and including day 12. On Day 5 a new set of 4 calling birds arrives and they will need feeding up to and including day 12, and so on giving 1,800 grams

Teaching Notes

This resource makes a good integrated activity for the end of term in December /beginning of January, with ability ranges from E2 to L2.

The extension questions are mostly E3 - L2 and it is always fascinating to see how learners go about solving the problems.

It also provides a good distraction over the Christmas Day dinner table!