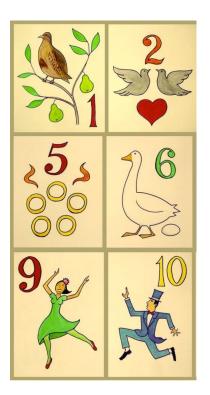
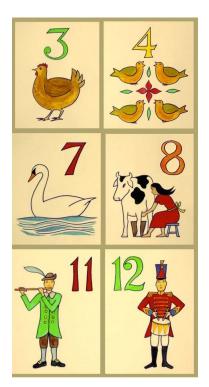
## The Twelve Days of Christmas

## On the twelfth day of Christmas my true love gave to me



Twelve drummers drumming, Eleven pipers piping, Ten lords a-leaping, Nine ladies dancing, 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.



In the song 'The Twelve Days of Christmas', on the first day of Christmas you receive a partridge in a pear tree, on the second day you receive a partridge in a pear tree and two turtle doves, on the third day you received a partridge in a pear tree, two turtle doves and three French hens and so on until on the twelfth day you receive all of the presents above.

Use the song lyrics to answer the following questions:

- 1. How many presents do you receive on day 4?
- 2. How many presents do you receive on day 12?
- 3. How many presents do you receive in total across all 12 days?
- 4. How many lords a-leaping do you receive in total across all 12 days?
- 5. How many golden rings do you receive in total across all 12 days?
- 6. How many birds do you receive in total across all 12 days?



Picture courtesy of Xavier Romero-Frias https://commons.wikimedia.org/wiki/File:XRF\_12days.jpg 1. How many presents do you receive on day 4?

4 + 3 + 2 + 1 = 10

2. How many presents do you receive on day 12?

12 + 11 + 10 + ... + 2 + 1 = 78

- 3. How many presents do you receive in total across all 12 days? 364
- How many lords a-leaping do you receive in total across all 12 days?
   10 × 3 = 30
- 5. How many golden rings do you receive in total across all 12 days?
  5 × 8 = 40
- 6. How many birds do you receive in total across all 12 days?

 $1 \times 12 + 2 \times 11 + 3 \times 10 + 4 \times 9 + 6 \times 7 + 7 \times 6 = 184$ 

