

## Year 5/6 Learning

### Mr Brown's Challenge Maths



If you've had a go at the Fluency and Codebreaker problems, you're welcome to have a go at some of these maths problems. Remember, try your best and if you get stuck, move on. Send your learning into [year5\\_6@camelford.cornwall.sch.uk](mailto:year5_6@camelford.cornwall.sch.uk)

#### Jack's book

The pages of Jack's book are numbered from 1.



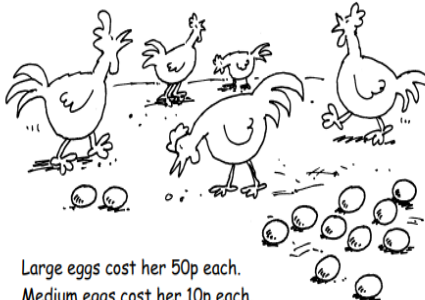
The page numbers have a total of 555 digits.

How many pages has the book?

How many of the digits are a 5?

#### Eggs

Mrs Choy spent exactly £10 on 100 eggs for her shop.



Large eggs cost her 50p each.  
Medium eggs cost her 10p each.  
Small eggs cost her 5p each.

For two of the sizes, she bought the same number of eggs.

How many of each size did she buy?

#### Slick Jim

Slick Jim won the lottery.

He spent two thirds of his winnings on a very posh house.



He spent two thirds of what he had left on a luxury yacht.



Then he spent two thirds of what he had left on a hot air balloon.



He spent his last £20000 on a flashy car.



How much did Slick Jim win on the lottery?

#### Pet shop

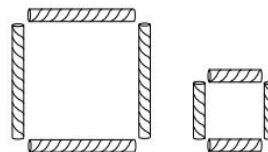


1. Jim bought a cat and dog for £60 each. Later he sold them. He made a profit of 20% on the dog. He made a loss of 20% on the cat. How much did he get altogether when he sold the cat and dog?
2. Jim bought another cat and dog. He sold them for £60 each. He made a profit of 20% on the dog. He made a loss of 20% on the cat. Did he make a profit or loss on the whole deal?

#### Square it up

You need six drinking straws each the same length. Cut two of them in half. You now have eight straws, four long and four short.

You can make 2 squares from the eight straws.



Arrange your eight straws to make 3 squares, all the same size.