Mathematics

One Thousand and Eighty Nine Downloadable Resource

Mr Langton

One Thousand and Eighty Nine

Think of a 3-digit number.
(Ideally you want all the digits to be different)

Reverse the digits to come up with a second number.

Subtract the smaller number from the larger number. **Call this number a**.

Reverse the digits of a. **Call this number b**.

Add a and b together, and write down the answer.

Try this again with a different number. What do you notice?

Does this always work? Can you find an example where it doesn't?

Roll up! Roll up!
Win a prize every time!

Pick a number between 1 and 9.
Multiply it by 3.
Add 3.
Multiply by 3.
Add the digits together.
Find your number in the grid, and win that prize!

1 £300	2 £100	3 £400	4 £500	5 £500	6 £800
7 £600	8 £600	9 £0	10 £400	11 £1,000	12 £900
13 £900	14 £100	15 £400	16 £700	17 £200	18 £600

Can you explain what is happening?