

LO: To calculate a mystery number (bronze).

1)I'm thinking of a number between 1 and 20.

It is even.

It has a 4 in it.

It has 2 digits.

My number is

2)I'm thinking of a number between 1 and 50.

It has a 4 in the tens column.

It is odd.

It is smaller than 43.

My number is

3)I'm thinking of a number between 1 and 100.

It is 5 more to the next 10.

There are fewer tens than units.

It is less than 30.

It is a factor of 75.

My number is25

4)I'm thinking of a number between 1 and 100.

There are more tens than units

It rounds to 90 to the nearest 10.

It is 4 more to get to the next 10.

My number is86

5)Now think of clues for your own mystery number.

LO: To calculate a mystery number (silver/gold).

1) I'm thinking of a number between 1 and 50.

It has a 4 in the tens column.

It is odd.

It is smaller than 43.

My number is

2) I'm thinking of a number between 1 and 100.

It is even.

The tens digit and the units digits are the same.

There is 6 more to the next 10.

My number is

3) I'm thinking of a number between 1 and 1000.

The digit sum is 20.

It has the same number of tens as units.

It is bigger than 800 and smaller than 900.

My number is866

4) Use these clues to discover what the mystery number is.

The number contains seven digits with no repeats. The last three digits are each a square number. The middle digit is the difference between the 2nd and 3rd. The 5th digit is a triangle number. The 2nd digit is the square root of another one of the digits. The last digit is twice the size of the first.

5) Now think of clues for your own mystery number.

Challenge



Magic Squares



A magic square is one where all rows, all columns and both diagonals have the same total. The total is called its magic number.

10	9	5
3	8	13
11	7	6

*The magic number
for this square is*

24



It's Magic!



1

2

3

4

5

6

9

8

7

The magic number is 15

Multiply your magic square by 3. Is it still magic?
Add or subtract a number. Does it stay magic?

LO: To calculate a mystery number (bronze)-answers.

1) 14

2) 41

3) 25

4) 86

5) Answers will vary

LO: To calculate a mystery number (silver/gold)-answers.

1) 41

2) 44

3) 866

4) 2385194

5) Answers will vary

Challenge answers may vary

One possibility...

4	3	8
9	5	1
2	7	6