**Investigations – Describing Numbers**

Q1. Think of a number between 1 and 20. Write down three sentences to describe it.

(For example, you could write:

My number is even/odd. My number is in the 3 times table. And so on).

Q2. Helen thinks of a number. She says

“My number is smaller than 20. My number is even”.

1. Give a number that Helen might be thinking of.
2. Give a number that you can be sure Helen is not thinking of.

Q3.

Each of these describes one number less than 100. Work out what the number is:

A is an odd number. It is a square number. It is a factor of 100. It is a 2 digit number.

B is a prime number. It is an odd number. It is a factor of 52.

Q4.

What is my number?  
Clue 1: My number is a multiple of 2 and 7.  
Clue 2: My number is less than 100 but greater than 50.  
Clue 3: My number is the product of three different prime numbers.

Q5.

There are three numbers. Try to work out what they are from the clues:

Two of the numbers are less than 40

One of them is a prime number

The three numbers added together are less than 100

One of the numbers is the square root of one of the other numbers

Two of them are even

One of the numbers is one more than a multiple of 10

Two of the numbers have more than one digit

None of them are triangle numbers

The three numbers add to make a prime number…...the digits of this total add to make one of the numbers.