

## Monthly Maths Problems:

Investigate these and explain your answers with examples.

### September:

#### Always, sometimes or never...

If you add 3 consecutive numbers (eg. 1,2 and 3), the answer is a multiple of 3.

### October:

#### Always, sometimes or never...

Halving a two-digit number will give a single digit number.

### November:

#### Always, sometimes or never...

Doubling a multiple of 5 will give a multiple of 10.

### December:

#### Always, sometimes or never...

Halving a multiple of 10 will give a multiple of 10.

## January:

Is dividing a number by 10 the same as dividing by 5 and then dividing by 5 again?

## February:

Make ten cards with the numbers 0 – 9 on them. Use all ten cards to do these challenges:

- a) 5 numbers that are multiples of 3
- b) 5 numbers that are multiples of 7
- c) 5 prime numbers

## March:

Always, sometimes or never...

A hexagon has six equal length sides.

**April:**

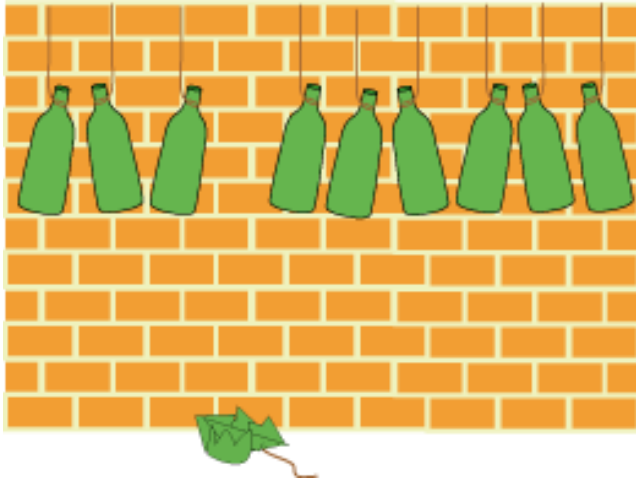
Ten green bottles hanging on a wall

Ten green bottles hanging on a wall

If one green bottle should accidentally fall

There'd be nine green bottles hanging on the wall

Nine green bottles .....



If the first bottle fell at ten past five in the morning (5.10a.m.) and the others fell down at 5 minute intervals, what would the time be when the last bottle fell down?

**May:**

Always, sometimes or never...

When you multiply two numbers together you always get a bigger number.

June:

Always, sometimes or never...

Triangles tessellate.

July:

Always, sometimes or never...

When you multiply two numbers together you always get a bigger number.