

## Numbers (and odd bits).

**Multiples** - times tables answers.

Multiples of 3 = 3, 6, 9, 12, 15, 18, .....

Multiples of 7 = 7, 14, 21, 28, 35, .....

Lowest common multiple; LCM – the smallest number that appears in the group of multiples.

e.g. LCM of 3 and 4

Multiples of 3 = 3, 6, 9, **12**, 15, 18,

Multiples of 4 = 4, 8, **12**, 16, 20,

LCM = 12

**Factors.** – the things you times to get the number, times tables questions.

Factors of 24 = [ 1x24, 2x12, 3x8, 4x6] = 1, 2, 3, 4, **6**, 8, 12 and 24

Factors of 18 = [ 1x18, 2x9, 3x6 ] = 1, 2, 3, **6**, 9 and 18

Highest common factor; HCF – the highest number that appears in the group of factors.

e.g. HCF of 18 and 24 = 6

**Squares, cubes and powers.**

$$6^2 = 6 \times 6 = 36$$

- six squared

$$6^3 = 6 \times 6 \times 6 = 216$$

- six cubed

$$6^7 = 6 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6 = 279936$$

- six to the power seven

buttons on your calculator

$[x^2]$  – squared button                       $6^2$  press [6]  $[x^2]$  [=]

$[x^y]$  – other powers                       $6^3$  press [6]  $[x^y]$  [3] [=]  
 $6^7$  press [6]  $[x^y]$  [7] [=]

**Square roots and cube roots.**

$[\sqrt{\quad}]$  - square root the opposite of squaring

Usually you press this button before the number (but not all calculators are the same).

e.g. square root of 64 =  $\sqrt{64} = [\sqrt{\quad}] [6] [4] [=]$  answer = 8

$[\sqrt[3]{\quad}]$  - cube root this works exactly as for square roots follow same procedure but use this button.

**IMPORTANT** You should actually know the first 20 square numbers and the first 10 cube numbers – **you need to learn them!**