KEY VOCAB

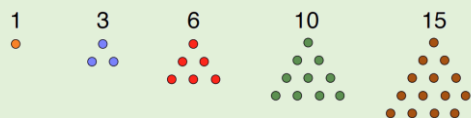**Integers** are whole numbers that can be positive, negative or zero.

Multiples are just times tables. Multiples of 5 are 5, 10, 15, 20, 25 …

Factors is a number that divides into another number exactly and without leaving a remainder. Factors of 10 are 1, 2, 5 and 10.

Prime numbers will only divide by themselves and 1. Here are the first twelve prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37.

Square numbers are a result of a number being multiplied by itself.
For example, 25 is a square number because 5 x 5 = 25.
Another square number would be 49 because 7 x 7 = 49.

Can you see why the numbers below are called **triangular numbers**?

1   3   6   10   15

KEY KNOWLEDGE

Order of Operations

Addition: Add, plus, sum, more, total...
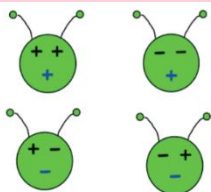
Subtraction: Difference, take away, minus...

Multiplication: Times, product, lots of, multiply...

Division: Share, splitting into equal parts...

B RACKETS
I NDICES
D IVISION
M ULTIPLICATION
A DDITION
S UBTRACTION

Negative Numbers

Remember: You can only apply these rules when the signs are touching or when you are multiplying/ dividing.

Rounding Decimal Places

3.248 rounded to 1 d.p.

3.248   3.2|48 → 3.2

1st dp 3.2 — Look at the next digit. 4 stays down - stay at 3.2.

3248 rounded to 2 d.p.

3.248   3.24|8 → 3.25

2nd dp 3.24 — Look at the next digit. 8 rounds up - go to 3.25.

MATHS
Y7 Number

SPEAK READ ARTICULATE THINK QUESTION WRITE SPELL

Multiplying by 10

27 x 10 = 270

Th	H	T	U
		2	7
	2	7	0

To multiply by 10, move the digits one space to the left.
To multiply by 100, move the digits two spaces to the left.
Don't forget to fill in any empty spaces with zeros!

Dividing by 10

270 ÷ 10 = 27

Th	H	T	U
	2	7	0
		2	7

To divide by 10, move the digits one space to the right.
To divide by 100, move the digits two spaces to the right.

FURTHER READING

Lowest Common Multiple (LCM) is the first number in the times tables of two or more numbers.

3's: 3, 6, 9, 12, 15, 18, (21) 24

7's: 7, 14, (21) 28, 35

LCM of 3 and 7 = 21

Highest Common Factor (HCF) is the biggest factor that divides into two or more numbers.

30	**12**
1 x 30	1 x 12
2 x 15	2 x (6)
3 x 10	3 x 4
5 x (6)	

HCF of 30 and 12 = 6