

## MATHS KNOWLEDGE ORGANISER – YEAR 7 TERM 2

	Topic	Information	Examples	Hegarty clip
1	Factor	A number that <b>divides exactly</b> into another number without a remainder.	The factors of 18 are: 1, 2, 3, 6, 9, 18	27
2	Multiple	The result of multiplying a number by an integer. The <b>times tables</b> of a number.	The first five multiples of 7 are:  7, 14, 21, 28, 35	
3	Highest Common Factor (HCF)	The <b>biggest</b> number that <b>divides exactly</b> into two or more numbers.	The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly.	31,32
4	Lowest Common Multiple (LCM)	The <b>smallest</b> number that is in the <b>times tables</b> of each of the numbers given.	The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables	34-36
5	Square Number	The number you get when you <b>multiply a number by itself</b>	<b>1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225...</b>  $9^2 = 9 \times 9 = 81$	
6	Square Root	The <b>number you multiply by itself</b> to get another number. The reverse process of squaring a number	$\sqrt{36} = 6$ because $6 \times 6 = 36$	
7	Prime Number	A number with <b>exactly two factors</b> . A number that can only be divided by itself and one.	The first ten prime numbers are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29	
8	Fraction of an amount	<b>Divide</b> by the <b>denominator</b> , <b>times</b> by the <b>Numerator</b>	Find $\frac{2}{5}$ of £60  $60 \div 5 = 12$ $12 \times 2 = 24$	77
9	Equivalent Fractions	Fractions which represent the <b>same value</b> .	$\frac{2}{5} = \frac{4}{10} = \frac{20}{50} = \frac{60}{150}$ etc.	59
10	Simplifying Fractions	Divide the numerator and denominator by the <b>highest common factor</b> .	$\frac{20}{45} = \frac{4}{9}$	61