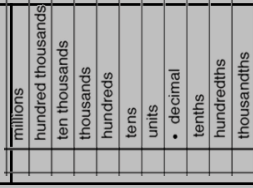


# Year 7 Unit 2

## Number

NUMBER SENSE	
<b>integer</b>	a <b>whole number</b> can be positive or negative
<b>place value</b>	the <b>value</b> of a digit in a number based on <b>where it lies</b>
<b>decimal</b>	<b>not</b> a whole number, it has a <b>decimal point</b> in it, can be positive or negative
<b>terminating decimals</b>	decimals which have a <b>finite</b> number of place values
<b>recurring decimals</b>	decimals with <b>repeating</b> digits or <b>repeating patterns</b> of digits
<b>negative</b>	a number that is <b>less than zero</b> , they can be decimals
<b>ascending</b>	numbers ordered from <b>smallest to largest</b>
<b>descending</b>	numbers ordered from <b>largest to smallest</b>



INEQUALITIES	
where two expressions are <b>not equal</b> in value	
<b>strict inequalities:</b>	$<$ less than $>$ greater than
<b>non-strict inequalities:</b>	$\leq$ less than or equal to $\geq$ greater than or equal to

MULTIPLES, FACTORS AND PRIME NUMBERS	
<b>multiple</b>	the result of <b>multiplying</b> a number by an integer, e.g. <i>the 3<sup>rd</sup> multiple of 7 is 21</i>
<b>lowest common multiple (LCM)</b>	the <b>lowest common number</b> in the <b>multiplication tables</b> of two or more different numbers
<b>factor</b>	a quantity which <b>divides equally</b> into a number, e.g. <i>factors of 8 are 1, 2, 4 and 8</i>
<b>highest common factor (HCF)</b>	the <b>highest factor</b> which belongs to two or more numbers
<b>prime number</b>	an integer greater than 1 that has <b>exactly two factors, 1 and itself</b>
<b>prime numbers</b>	<b>2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31...</b>
<b>prime factor</b>	a <b>factor</b> of a number which is also <b>prime</b>
<b>product of prime factors (prime factorisation)</b>	a set of <b>prime factors</b> which <b>multiply</b> to give a number <i>e.g. prime factor tree</i> $12 = 2 \times 2 \times 3$ or $2^2 \times 3$

OPERATIONS		
<b>addition</b>	symbol: <b>+</b> ( <i>plus</i> )	Vocabulary: <b>add, more than, sum, total, all together, more than</b>
<b>subtraction</b>	symbol: <b>-</b> ( <i>minus</i> )	Vocabulary: <b>subtract, less, difference, take away, fewer than</b>
<b>multiplication</b>	Symbol: <b>X</b> ( <i>times</i> )	Vocabulary: <b>multiply, lots of, product</b>
<b>division</b>	Symbol: $\frac{\quad}{\quad}$ ( <i>obelus</i> )	Vocabulary: <b>divide, split, share</b>
<b>quotient</b>	the <b>result</b> of a division ( <b>dividend</b> $\div$ <b>divisor</b> = <b>quotient</b> )	
<b>remainder</b>	the amount <b>left over</b> when a divisor doesn't fit into a dividend exactly	

APPROXIMATION AND ESTIMATION	
<b>rounding</b>	writing a number <b>less accurately</b> so it is easier to work with below 5, <b>stay the same</b> , 5 or above, <b>round up</b>
<b>decimal place</b>	the position of a digit after the <b>decimal point</b>
<b>money</b>	when working in pounds (£) and pence, all answers should be given to <b>2 decimal places</b>
<b>significant figure</b>	1 <sup>st</sup> significant figure: the <b>first digit</b> in a number which is <b>not a zero</b>
<b>estimate a calculation</b>	The <b>process</b> of rounding numbers to <b>one significant figure</b> and then <b>calculating</b> to get an <b>approximate</b> answer.
<b>approximate</b>	an answer <b>close</b> to the exact value

PERIMETER	
<b>perimeter</b>	the shortest <b>distance</b> around a shape, to calculate it you find the <b>sum of its sides</b>
<b>rectangle perimeter</b>	$P = (l+w) \times 2$ add the length and width, then multiply by 2
<b>perimeter of a compound shape</b>	find all the <b>lengths</b> around the outside of the shape and <b>add</b> them up

AREA		
<b>area</b>	the amount of <b>space</b> a <b>2D shape</b> takes up	
<b>area of a rectangle</b>	$A = bh$ Area = <b>base x height</b>	
<b>area of a triangle</b>	$A = \frac{bh}{2}$ Area = <b>base x height</b> <b>2</b>	
<b>area of a compound shape</b>	work out the <b>area</b> of each shape, <b>add</b> together	