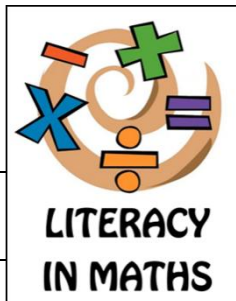
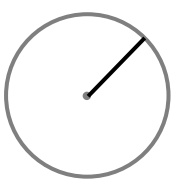
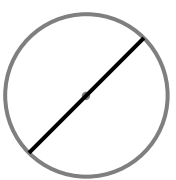
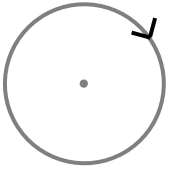
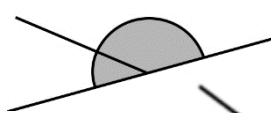

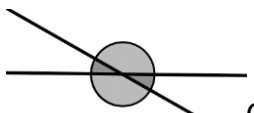
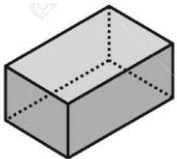

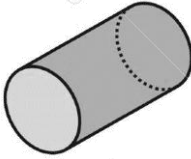
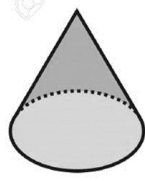
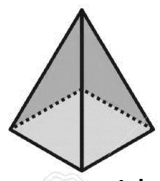


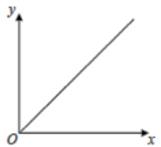
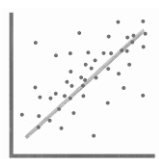
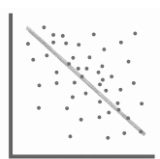
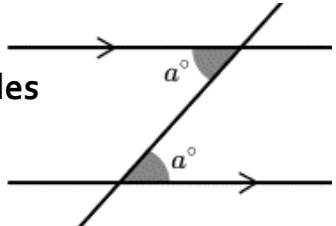
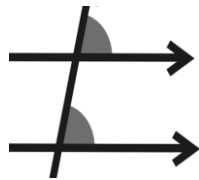
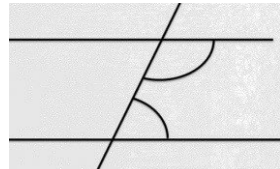
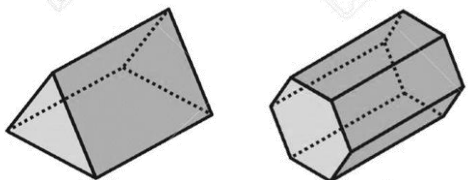

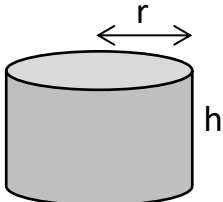
Y10 ESSENTIAL KNOWLEDGE / LITERACY (E/L)



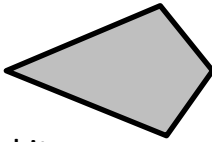
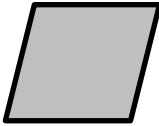
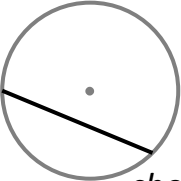
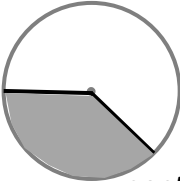
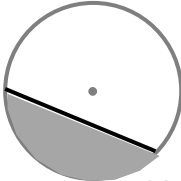
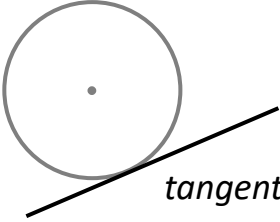
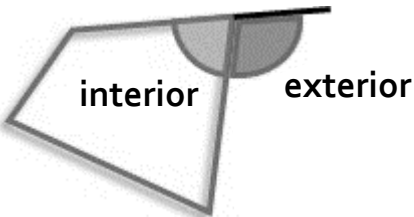
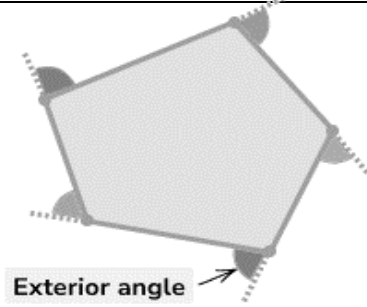
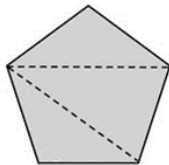
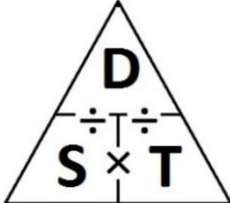
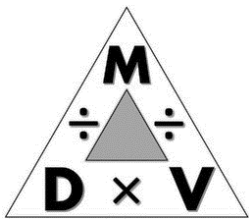
(LEARN THIS KEY INFORMATION FROM PREVIOUS YEARS)



1.	The subject of a formula is the letter it starts with. (e.g. in the formula $H = 5m + d$, the subject is H.)
2.	A term is a single 'piece' of algebra; the coefficient is the number part of the term (e.g. in the expression $5x - 4y + 8$, the coefficient of y is -4)
3.	expand or multiply out mean 'rewrite the expression without the brackets'
4.	An equation is only true for certain values (e.g. $5x = 15$ is only true when $x = 3$) An identity is always true – it links equivalent expressions (e.g. $5(x + 2) \equiv 5x + 10$)
5.	A quadratic expression has x^2 as its highest power (e.g. $5x^2 + 3x - 8$)
6.	 <i>radius</i>  <i>diameter</i>  <i>circumference</i>
7.	An irrational number is one that can't be represented as a fraction or integer (Its decimal form goes on forever without recurring.) A surd is an expression with a root which is irrational.
8.	The first five cube numbers are: 1, 8, 27, 64, 125
9.	The hypotenuse is the longest side of a right-angled triangle
10.	$<$ less than $>$ greater than \leq less than or equal to \geq greater than or equal to
11.	integer means 'whole number'
12.	 Angles on a straight line add up to 180°  Angles around a point add up to 360°  Opposite angles are equal
13.	The four types of transformation are: translate , rotate , reflect , and enlarge
14.	The origin is at (0, 0)
15.	congruent means 'the same shape and size' (one shape can be rotated or reflected)
16.	Shapes are similar (mathematically similar) if one is an enlargement of the other
17.	The base angles in an isosceles triangle are equal.
18.	 cuboid  sphere  cylinder  cone  pyramid
19.	factorise means 'put into brackets'
20.	A difference of two squares is an expression with two 'squares' subtracted e.g. $x^2 - 25$

Know

	They factorise into two brackets like this: $(x + 5)(x - 5)$	
21.	A graph showing direct proportion is: <ul style="list-style-type: none"> - a straight line - with positive gradient - through the origin 	
22.	 <i>positive correlation</i>	 <i>negative correlation</i>
23.	An outlier is a genuine piece of data which doesn't fit the pattern of the rest of the data An anomaly is a piece of data which is a mistake	
24.	Angles near parallel lines: <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>alternate angles are equal</p> </div> <div style="text-align: center;">  <p>corresponding angles are equal</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>co-interior angles add up to 180°</p> </div>	
25.	class or class interval means 'group' (e.g. height (cm): $0 < h \leq 20$)	
26.	A line segment is a short section of a line, joining two points	
27.	bisect means 'cut exactly in half'	
28.	perpendicular means 'at right angles'	
29.	A locus is a set of points that follow a rule (plural: loci)	
30.	A prism has the same shape running all the way through the middle	 <div style="position: absolute; right: 0; top: 50%; transform: translateY(-50%);">  </div>
31.	In the general line equation $y = mx + c$, m is the gradient (steepness), and c is the y-axis intercept (e.g. the line $y = 3x - 2$ has gradient 3 and crosses the y-axis at -2)	
32.	For the surface area of a solid, find the area of each face and add them all together	
33.	Volume of a cylinder: $V = \pi r^2 \times h$	
34.	perimeter is the total distance around the outside of a shape	
35.	Anything to power 0 is 1 (e.g. $17^0 = 1$, $p^0 = 1$)	
36.	index means power (plural: indices)	

37.	    <p>parallelogram trapezium kite rhombus</p>
38.	A plan view is looking down from above (a 'birds eye view')
39.	    <p>chord sector segment tangent</p>
40.	$C = d \times \pi$ to calculate the circumference of a circle
41.	$A = r^2 \times \pi$ to calculate the area of a circle
42.	in terms of π means 'leave π in your answer'
43.	bearings are measured: clockwise from North and written as 3 digits (e.g. 082°)
44.	<p>A pair of interior and exterior angles adds up to 180°</p> 
45.	<p>The exterior angles of any polygon add up to 360°</p> 
46.	<p>For an n-sided polygon, sum of interior angles = $(n - 2) \times 180$</p> 
47.	The balance of a bank account is the amount of money that is in it.
48.	depreciate means 'decrease in value'
49.	<p>Learn the speed, distance, time triangle:</p> 
50.	<p>Learn the density, mass, volume triangle:</p> 

Know