

Topic 1: Standard Form			
	Students should be taught:	Notes	Edexcel Ref
A	calculate with and interpret numbers in the form $a \times 10^n$ where n is an integer and $1 < a < 10$		1.9
B	use a scientific electronic calculator to determine numerical results		1.11
Topic 2: Solving Linear Equations			
	Students should be taught:	Notes	Edexcel Ref
A	solve linear equations, with integer or fractional coefficients, in one unknown in which the unknown appears on either side or both sides of the equation		2.4
B	set up simple linear equations from given data		2.4
Topic 3: 3D Shapes and Volume			
	Students should be taught:	Notes	Edexcel Ref
A	recognise and give the names of solids	To include cube, cuboid, prism, pyramid, cylinder, sphere and cone	4.10
B	understand the terms 'face', 'edge' and 'vertex' in the context of 3D solids		4.10
C	find the surface area of simple shapes using the area formulae for triangles and rectangles		4.10
D	find the surface area of a cylinder		4.10
E	find the volume of prisms, including cuboids and cylinders, using an appropriate formula		4.10
F	convert between units of volume within the metric system	e.g. cm ³ to m ³ and vice versa and 1 litre = 1000 cm ³	4.10
Topic 4: Transformation			
	Students should be taught:	Notes	Edexcel Ref
A	understand that rotations are specified by a centre and an angle		5.2
B	rotate a shape about a point through a given angle		5.2
C	recognise that an anti-clockwise rotation is a <i>positive</i> angle of rotation and a clockwise rotation is a <i>negative</i> angle of rotation		5.2
D	understand that reflections are specified by a mirror line	Such as $x = 1$, $y = 2$, $y = x$, $y - x = 0$ e.g. reflect a triangle in the line $y = x$	5.2
E	construct a mirror line given an object and reflect a shape given a mirror line		5.2
F	understand that translations are specified by a distance and direction		5.2
G	translate a shape		5.2
H	understand and use column vectors in translations		5.2
I	understand that rotations, reflections and translations preserve length and angle so that a transformed shape under any of these transformations remains congruent to the original shape		5.2
J	understand that enlargements are specified by a centre and a scale factor	Positive scale factor only (including fractions)	5.2
K	understand that enlargements preserve angles and not lengths		5.2
L	enlarge a shape given the scale factor	With or without a centre given	5.2

M	identify and give complete descriptions of transformations		5.2
Topic 5: Similarity			
	Students should be taught:	Notes	Edexcel Ref
A	understand and use the geometrical properties that similar figures have corresponding lengths in the same ratio but corresponding angles remain unchanged		4.11
B	use and interpret maps and scale drawings		4.11
Topic 6: Set language and Notation			
	Students should be taught:	Notes	Edexcel Ref
A	understand the definition of a set		1.5
B	use the set notation \cup , \cap and \in and \notin		1.5
C	understand the concept of the universal set and the empty set and the symbols for these sets		1.5
D	understand and use the complement of a set		1.5
E	use Venn diagrams to represent sets		1.5
Topic 7: Probability			
	Students should be taught:	Notes	Edexcel Ref
A	understand the language of probability	Outcomes, equal likelihood, events, random	6.3
B	understand and use the probability scale	$P(\text{certainty}) = 1$ $P(\text{impossibility}) = 0$	6.3
C	understand and use estimates or measures of probability from theoretical models		6.3
D	find probabilities from a Venn diagram		6.3
E	understand the concepts of a sample space and an event, and how the probability of an event happening can be determined from the sample space	For the tossing of two coins, the sample space can be listed as: Heads (H), Tails (T): (H, H), (H, T), (T, H), (T, T)	6.3
F	list all the outcomes for single events and for two successive events in a systematic way		6.3
G	estimate probabilities from previously collected data		6.3
H	calculate the probability of the complement of an event happening	$P(A') = 1 - P(A)$	6.3
I	use the addition rule of probability for mutually exclusive events	$P(\text{Either A or B occurring}) = P(A) + P(B)$ when A and B are mutually exclusive	6.3
J	understand and use the term 'expected frequency'	Determine an estimate of the number of times an event with a probability of 0.4 will happen over 300 tries	6.3
Topic 8: Trigonometry and Pythagoras Theorem			
	Students should be taught:	Notes	Edexcel Ref
A	know, understand and use Pythagoras' theorem in two dimensions		4.8
B	know, understand and use sine, cosine and tangent of acute angles to determine lengths and angles of a right-angled triangle		4.8
C	apply trigonometrical methods to solve problems in two dimensions	To include bearings	4.8

Topic 9: Simultaneous Equations			
	Students should be taught:	Notes	Edexcel Ref
A	calculate the exact solution of two simultaneous equations in two unknowns	$x + y = 14$, $x - y = 2$ $2a + 5b = 12$, $3a + b = 5$	2.6
Topic 10 : Constructions and Circle Properties			
	Students should be taught:	Notes	Edexcel Ref
A	measure and draw lines to the nearest millimetre		4.5
B	construct triangles and other two-dimensional shapes using a combination of a ruler, a protractor and compasses		4.5
C	solve problems using scale drawings		4.5
D	use straight edge and compasses to: (i)construct the perpendicular bisector of a line segment (ii) construct the bisector of an angle		4.5
E	recognise the terms 'centre', 'radius', 'chord', 'diameter', 'circumference', 'tangent', 'arc', 'sector' and 'segment' of a circle		4.6
F	understand chord and tangent properties of circles	Two tangents from a point to a circle are equal in length Tangents are perpendicular to the radius at the point of contact The line from the centre of a circle which is perpendicular to a chord bisects the chord (and the converse)	4.6
Topic 11 : Algebraic Factorisation			
	Students should be taught:	Notes	Edexcel Ref
A	understand the concept of a quadratic expression and be able to factorise such expressions (limited to $x^2 + bx + c$)		2.2
B	solve quadratic equations by factorisation (limited to $x^2 + bx + c = 0$)		2.7
Topic 12 : Inequalities			
	Students should be taught:	Notes	Edexcel Ref
A	understand and use the different inequality symbols		2.8
B	understand and use the convention for open and closed intervals on a number line		2.8
C	solve simple linear inequalities in one variable and represent the solution set on a number line		2.8
D	represent simple linear inequalities on rectangular Cartesian graphs		2.8
E	identify regions on rectangular Cartesian graphs defined by simple linear inequalities		2.8