Stage 9 – Geometry: Visualising and constructing

Know it!



Knowledge		
I know	How to use ruler and compasses to construct the perpendicular bisector of a line segment	
I know	How to use ruler and compasses to bisect an angle	
I know	How to use a ruler and compasses to construct a perpendicular to a line from a point and at a point	
I know	How to construct the locus of points a fixed distance from a point and from a line	
I know	How to combine techniques to solve complex loci problems	
I know	How to construct a shape from its plans and elevations and vice versa	

Link it!



Backward	Forward
Measure distances to the nearest millimetre.	
Use compasses to draw circles. Interpret plan and elevations.	

Prove it!



(Given a single point marked on the board) show me a point 30 cm away from this point. And another. And another ...

Demonstrate how to create the perpendicular bisector (or other constructions).

Say it!

Vocabulary	Definition
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Compasses	An instrument for drawing circles and arcs and measuring distances between points
Construction	To draw a shape, line or angle accurately using a compass and straightedge (ruler).
Construction	Sometimes you are also allowed to use a protractor and triangle.
	Part of the circumference of a circle.
Arc	E.g. using a compass but not drawing an entire circle.
	The part of a line that connects two points.
Line segment	It is the shortest distance between the two points.
Perpendicular bisector	A type of construction that draws a line exactly equal distance from two points.
Angle bisector	A type of construction that draws a line exactly equal distance between two lines.
Locus/Loci	The set of all points that share a property.
Equidistant	Equal distance