Y9 Maths Knowledge Organiser Topic 3: Constructions and Loci

What must I be able to do?	Key vocabulary	

You may need to revise the following:
 • Year 7 Topic 13: Constructions and Classifying 2D Shapes
 New content:
 • Construct a triangle knowing all 3 sides by using a compass
    ➤ Sparx M565
 • Construct an angle bisector
    ➤ Sparx M232
 • Construct a perpendicular bisector
    ➤ Sparx M239
 • Construct a 90° angle from a point
 • Draw a locus for a given rule
    ➤ Sparx M253
	Bisector	The line which splits something in half.

	Loci (plural locus)	All the possible positions or points which fit a rule.
	Equidistant	The same distance from something at all times.
	Arc	A part of a circumference of a circle.

SSS Triangle

Draw the 1st side as a base

Set the compass to the lengths of 2nd and 3rd sides by using a ruler

Use a ruler to connect the ends of the base to the overlap

Angle bisector

Compass stays the same size for these 2 arcs

Perpendicular bisector

Compass over half the length of the line

Compass must be the same size as before

90° angle from a point

Compass stays the same size for these 2 arcs

Standard Loci

Equidistant from a point

Equidistant from a line

Equidistant from 2 points

Equidistant from 2 lines

The same as a perpendicular bisector

The same as an angle bisector