

Y9 Maths Knowledge Organiser Topic 3: Constructions and Loci

<p>What must I be able to do?</p>	<p>Key vocabulary</p>	
<p>You may need to revise the following:</p>	<p>Bisector</p>	<p>The <u>line</u> which splits something in <u>half</u>.</p>
<p>• Year 7 Topic 12: Constructions and Classifying 2D Shapes</p>	<p>Loci (plural locus)</p>	<p><u>All</u> the possible positions or <u>points</u> which fit a <u>rule</u>.</p>
<p>New content:</p>	<p>Equidistant</p>	<p>The <u>same distance</u> from something at all times.</p>
<ul style="list-style-type: none"> Construct a triangle knowing all 3 sides by using a compass <ul style="list-style-type: none"> ➤ Sparx M565 Construct an angle bisector <ul style="list-style-type: none"> ➤ Sparx M232 Construct a perpendicular bisector <ul style="list-style-type: none"> ➤ Sparx M239 Construct a 90° angle from a point Draw a locus for a given rule <ul style="list-style-type: none"> ➤ Sparx M253 		

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

The same as a perpendicular bisector

Equidistant from 2 lines

The same as an angle bisector