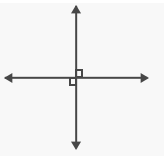
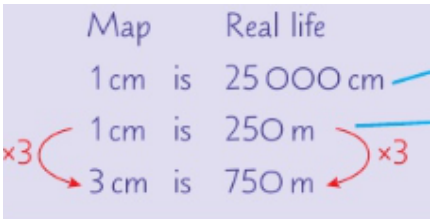
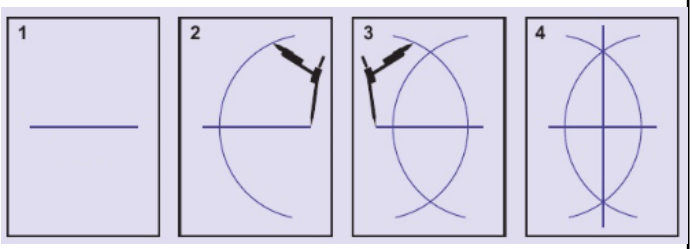
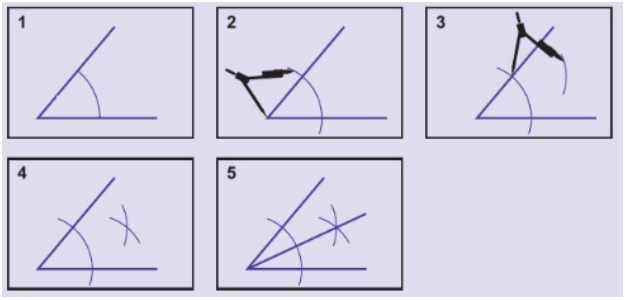
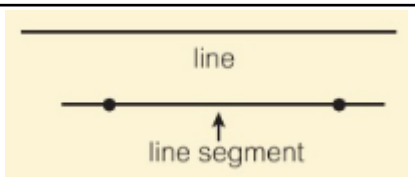
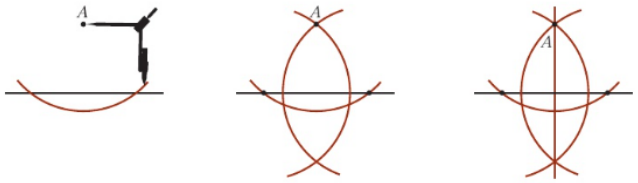
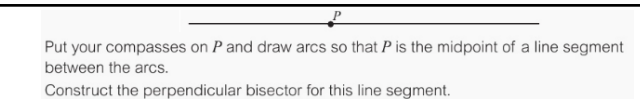
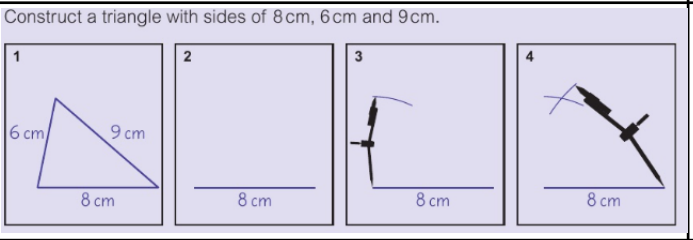
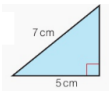
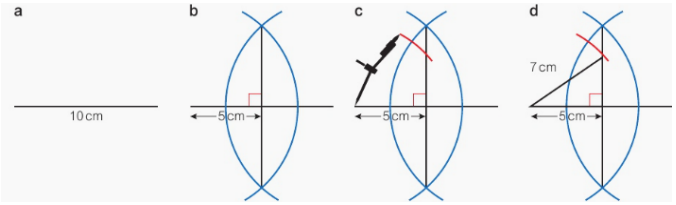
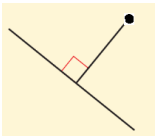
Year 9: Unit 5 Constructions **Knowledge Organiser**

Prior Knowledge		
Metric conversions	3.5km = 3.5 x 1000 = 3500m Multiply to go to a smaller unit of measure 56mm = 56 ÷ 10 = 5.6cm Divide to go to a bigger unit of measure	Length: 1km = 1000m 1m = 1000mm 1m = 100cm 1cm = 10mm
Perpendicular		means at right angles. eg two lines are perpendicular if they have a 90 degree angle between them
Core knowledge		
Scale	eg. For scale 1 : 25 000 what does 3cm represent? 	You can write scale as a ratio scale 1 : 25 000 means 1cm on the map represents 25 000 cm in real life
Construct		Construct means accurately draw with a ruler, pencil and compasses
Bisect		Bisect means to cut in half
Perpendicular bisector	How to construct: 	A perpendicular bisector is a line that cuts another line in half at right angles
Angle bisector	How to construct: 	An angle bisector cuts an angle in half
Line segment		A line segment has two clear end points
Perpendicular from a point to a line	**a** Draw an arc from point A. **b** Keep compasses the same distance apart. Draw an arc from each of the two points where the arc crosses the line. **c** Join the points where the arcs intersect. 	Construct a perpendicular from a point to a line using ruler and compasses

perpendicular from a point on a line		Construct a perpendicular from a point on a line using a ruler and compasses
Construct triangle SSS		Use a ruler and compasses to construct a triangle with three given sides (SSS)
Construct a right angled triangle	eg  	Use a ruler and compasses to construct a right angled triangle
Accurate drawings		Accurate drawings are drawn to scale, with accurate angles. Use a ruler, pencil and protractor to make accurate drawings.
Shortest distance from a point to a line		The shortest distance from a point to a line is the perpendicular distance