

Scheme of Learning: Year 10 Spring Term

Topic Sequence: Geometry

5	6	7
Angles and Bearings	Working with Circles	Vectors

Topic Overview: Angles and Bearings

This topic briefly recaps bearings from year 9, accurate drawing and use of scale as in the use of parallel line angle rules, and reinforcing these rules with trigonometry and Pythagoras from earlier this year.

Learning Sequence:

Use cardinal directions and related angles (R):

In this small step, student revisit their work on angles to prepare them for learning about bearings. They should be comfortable with both measuring and drawing angles and identify angles using the three letter notation

Draw/interpret scale diagrams (R):

This review step reminds students of work on scale, constructions and ratio

Understand and represent bearings (R):

Students learn that bearings are always measured clockwise from North and always given as 3 figures.

Measure and read bearings: (R):

Students explore and discover the relationships between angles and the relative positions of points

Scale drawings using bearing (R):

Students move on to more complex problems requiring them to draw scale diagrams

Bearings with angle rules and right angled geometry:

Students apply bearings to angle facts and also trigonometry and Pythagoras

Bearings with the sine and cosine rule (H):

This step revisits and extends prior learning, using the sine and cosine rules. Students consider sketching diagrams to identify lengths and angles needed.

Sequence of Learning:		Topic Resources:	
1	<u>Use cardinal directions and related angles (R):</u>	Knowledge Map:	Bearings Right Angled Trigonometry Angle Facts
2	<u>Draw/interpret scale diagrams (R):</u>		
3	<u>Understand and represent bearings (R):</u>	Assessment:	
4	<u>Measure and read bearings: (R):</u>	Knowledge:	End of Topic Test
5	<u>Scale drawings using bearing (R):</u>	Application of Knowledge:	Termly Summative Assessments
6	<u>Bearings with angle rules and right angled geometry:</u>	Supportive Reading:	
7	<u>Bearings with the sine and cosine rule (H):</u>	Any supported reading listed here	Sparx maths: www.sparxmaths.co.uk
			Corbett Maths: www.corbettmaths.com
			AQA Revision guide