Year 10 Maths Learning Journey

Spring Term 1

Geometry: Angles & Bearings

Core knowledge	Reference
Use cardinal directions and related angles (R) "What does due East mean?"	WORKSHEET
Draw and interpret scale diagrams (R) "Which is more detailed, a 1 : 25 000 map or a 1 : 50 000 map?"	WORKSHEET
Understand and represent bearings "Is it possible to have a bearing of 400°? Why or why not?"	WORKSHEET
Measure and read bearings "Is the bearing of A from B the same as the bearing of B from A?"	WORKSHEET
Make scale drawings using bearings "Why is a scale represented as a ratio?"	WORKSHEET
Calculate bearings using angle rules "Why are rules for angles in parallel lines useful for solving bearings problems?"	WORKSHEET
Solve bearings problems using Pythagoras and trigonometry "How do you know which trigonometric ratio to use?"	WORKSHEET
Solve bearings problems using the sine and cosine rules (H) "What is the minimum amount of information required to use the sine/cosine rule?	WORKSHEET

Learning Checkpoints

LC Title	Completed	Dirt
Angles & Bearings		

Key Vocabulary:

Compass – Mathematical device used to draw accurate arcs.

Point – single location of infinitesimally small area.

Three letter notation – Mathematical convention used to reference angles.

Enlarge – Mathematical transformation which changes the size of a shape.

Scale factor – Multiplicative quantity which describes an enlargement.

Ratio – part to part comparison of two quantities.

Similar – Two shapes are similar if they have dimensions in the same ratio.

Clockwise – following the direction of rotation of an analogue clock.

North line – line indicating the direction of North.

Parallel – Having the same gradient/direction.

Trigonometry – Methods for the measurement of triangles.

Perpendicular – Meeting at right angles.