

## Learning Journey Mathematics - Key Stage 4 Foundation

## Accuracy and bounds

**Proof** 

Error intervals using upper and lower bounds.

Calculating with upper and lower bounds

**Graphs** 

Simultaneous equations

Equations of straight lines between two points.

Recognise, sketch and interpret graphs

Construct and solve two linear equations with two unknowns, graphically and algebraically

**Vectors** 

Trigonometry in rightangled triangles

Calculating missing side lengths and angles, with and without a calculator

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Advanced geometry

Similarity and congruence in 2D

Circles, arcs, sectors, cylinders, spheres, pyramids

Constructions in 2D and 3D, loci, maps and bearings

Compound measures

Solving loci problems, draw and interpret scale diagrams/maps including using bearings

Speed, distance, time measures Length, capacity, mass measures Pressure measures, Density measures

Geometry reasoning and problem solving

Advanced probability

Perimeter, area and volume

Tree diagrams and conditional probability

**Quadratic** equations

Geometry reasoning and problem solving

Reasoning with data

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Factorising and solving quadratic equations

Angles, polygons, parallel lines

Collecting, representing and analysing data