

# 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 right-angled 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