

# Year 11: What will I learn about in Mathematics?

## EQ:

How can we use the connections between, and representations of, different mathematical topics to aid our understanding?

## Key Concepts:

Generalisation, Representation, Simplification



Final exam consisting of 3 90 minute papers.

EXAM

Q4



Revision of all topics.

Sine and Cosine, Circle Theorems.



Q3

Statistical Measures, Growth and decay, vectors, transformation of functions.



Q2

## Key Concepts:

Change, Generalisation, Models, Representation Simplification.

## Key Concepts:

Change, Justification, Quantity, Representation, Space

Q1

# Year 10: What will I learn about in Mathematics?

## Key Concepts:

Change, Equivalence, Generalisation, Justification, Representation

## EQ:

How do we identify the correct area of mathematics to use to solve a problem?



Graphs, simultaneous equations.

## Key Concepts:

Equivalence, Justification, Models, Quantity, Representation

Q4

Volume, Quadratics, algebra, scatter graphs.



3D Shapes, Pythagoras and trigonometry, construction, probability.



Q3

Congruence and similarity, measurement, percentages.



Q2

## Key Concepts:

Change, Equivalence, Justification, Measurement, Quantity

## Key Concepts:

Generalisation, Models, Representation, Space.

Q1

# Year 9: What will I learn about in **Mathematics**?

## Key Concepts:

Change, Equivalence, Measurement, Models, Representation, Simplification.

## EQ:

Is there a concept that allows us to better understand the workings of the topic or method?



Indices and standard form, surds, probability, transformations.

## Key Concepts:

Generation, Measurement, Models, Representation, Simplification

Q4

Perimeter and area, real life graphs, polygons.



Linear Graphs, Limitations of rounding, representing data.



Q3

Fractions and Percentages, Pythagoras, Ratio and Proportion.

Q2

## Key Concepts:

Equivalence, Generation, Measurement, Pattern, Representation

## Key Concepts:

Change, Equivalence, Models, Patterns, Quantity, Representation, Simplification

Q1



# Year 8: What will I learn about in Mathematics?

## Key Concepts:

Change, Measurement, Patterns, Representation, Simplification

## EQ:

What connections can we find between the different mathematical topics?



Sequences, Indices, Scale and Bearings.

## Key Concepts:

Justification, Models, Representation, Space

Q4

Cartesian plane, Collecting Data, Using algebra.



Ratio, multiplicative change, fractions.



Q3

Estimation, probability, prime factors.



Q2

## Key Concepts:

Justification, Quantity, Representation, Simplification

## Key Concepts:

Equivalence, Generalisation, Patterns, Justification, Representation, Simplification

Q1

# Year 7: What will I learn about in Mathematics?

## Key Concepts:

Justification, Measurement, Representation, Space

## EQ:

How can we represent, in objects, diagrams and numbers, the basic building blocks of mathematics?

## Key Concepts:

Equivalence, Generalisation, Models, Quantity, Representation

Construction, Geometric Reasoning.



Q4



Producing a video sequence: Planning the creation of a video



Directed Number, fractions.

Q3

Place Value, Algebraic Notation, Equality, Sequences.



Q2



Fractions, Decimals and Percentages, Addition, Subtraction, Multiplication and Division.

## Key Concepts:

Equivalence, Quantity, Representation

## Key Concepts:

Equivalence, Generalisation, Models, Patterns, Representation

Q1