

# Mathematics – KS3 Curriculum Map



Central Region  
Schools Trust

Founded by the RSA

## Autumn 1 – Reasoning with Algebra

Straight line graphs  
Forming and solving equations  
Testing conjectures

## Autumn 2 – Constructing in 2D and 3D

Three-dimensional shapes  
Constructions and congruency

## Spring 1 – Reasoning with Number

Numbers  
Using percentages  
Maths and money

## Spring 2 – Reasoning with Geometry

Deduction  
Rotations and translation  
Pythagoras' theorem

## Summer 1 – Reasoning with Proportion

Enlargement and similarity  
Solving ratio and proportion problems  
Rates

## Summer 2 – Representations and Revision

Probability  
Algebraic representation

Year  
9

## Autumn 1 – Proportional Reasoning

Ratio  
Proportion and scale  
Algebraic manipulation

## Autumn 2 – Algebra, Number, Geometry

Algebra - Coordinates and graphs  
Number - Multiply and divide fractions  
Geometry - Symmetry and reflection

## Spring 1 – Geometry, Algebra, Number

Geometry - Area, volume, density  
Algebra - Equations and inequalities  
Number - Percentages

## Spring 2 – Algebra, Number, Statistics

Algebra – indices  
Number – Standard form  
Statistics – interpret and represent data

## Summer 1 – Geometry and Probability

Geometry - Angles in parallel lines and polygons  
Probability – Tables and probability  
Geometry – circles

## Summer 2 – Statistics and Algebra

Statistics – graphs and charts  
Algebra – sequences

Year  
8

## Autumn 1 – Algebraic Thinking

Sequences  
Algebraic notation and substitution  
Expressions and equations

## Autumn 2 – Number and Statistics

Place value, ordering and rounding  
Four operations  
Averages and range  
Rounding and estimation

## Spring 1 – Statistics and Number

Graphing data  
Fractions, Decimals, Percentages  
Directed number - Operations and equations

## Spring 2 – Fractional Thinking and Geometry

Fractions and percentages of amounts  
perimeter and area

## Summer 1 – Directed Number

Speed, distance and time  
Properties of number

## Summer 2 – Number and Geometry

Add and subtract fractions  
Angles and polygons

Year  
7

## Autumn 1 – Place Value and the Four Operations

Place Value  
Addition and Subtraction inc. Perimeter and Place Value  
Multiplication and Division inc. Area and Volume

## Autumn 2 – Fractions and Decimals

Inc. Adding and subtracting fractions  
Measurement inc. converting units

## Spring 1 – Ratio and Algebra

Ratio inc. Introduction and scale factors  
Algebra inc. Substitution

## Spring 2 – Fractions Decimals Percentages, Measurement and Statistics

Statistics inc. Pie charts and mean

## Summer 1 – Shape, Revision and Problem Solving

Properties of Shape inc. angles, position and direction  
Revision pre-SATS

## Summer 2 – Y7 Transition/Problem Solving

Real life maths  
More complex algebra inc. balancing equations, pie charts, rules of angle, ratio, addition and subtraction of negatives

Year  
6