Year 7

KS3 Maths Curriculum

Introduction to Algebra

How do function machines work? How can we use substitution to find the value of an expression? What is meant by the term 'equivalence' in algebra?

Angles and lines

How can we use the interior and exterior angles of shapes to determine how many sides they have? What are the rules for angles within parallel lines?

Introduction to equations

How can bar models enable us to solve one and two step equations? Can these have negative or fractional solutions?

Properties of shapes

What is the difference between perimeter and area? What are compound shapes? Can we find perimeter and area of shapes using algebra?

Ratio, patterns and sequences

What is ratio? How can ratio be simplified and how can we calculate using ratio? Is there a link between ratio and fractions?

How can we determine if a sequence is linear or non-linear? What does 'term-to-term' mean in sequences?

Place value, Ordering and rounding

How can we order and compare integers and decimals? How does rounding to a degree of accuracy enable us to estimate solutions? What is standard form?

Four operations and negative numbers

What methods can be used for multiplying and dividing by decimals? What happens when that decimal is less than one? Why does a positive square number have two roots?

FDP equivalence

What are the relationships between fractions, decimals and percentages and how can we use these to prove equivalence? What is the difference between an improper fraction and a mixed number?

Working with fractions

How can the four operations be applied to fractions?

Factors, multiples and primes

What is the difference between factors and multiples? How can we describe a number using prime factors? What do 'HCF' and 'LCM' mean?