Year 7 Maths

Autumn term

Weeks 1-2: Sequences

Videos
Linear and Non Linear Sequences
Explain the term to term rule
Exercises
Linear and Non Linear Sequences
Explain the term to term rule

Weeks 3-4: Understand and use Algebraic Notation

Videos
Substitute values into single operation expressions
Substitute values into two-step expressions

Exercises
Substitute values into single operation expressions
Substitute values into two-step expressions

Weeks 5-6 Equality and Equivalence

Videos
Understand and Use Fact Families
Understand the meaning of like and unlike terms

Exercises
Understand and Use Fact Families
Understand the meaning of like and unlike terms

Weeks 7-9 Place Value, Ordering Integers & Decimals

Videos
Compare two numbers using equality and inequality notation
Understand place value for decimals
Position Decimals on a Number Line
Round a number to 1 significant figure

Exercises
Compare two numbers using equality and inequality notation
Understand place value for decimals
Position Decimals on a Number Line
Round a number to 1 significant figure

Weeks 10-12 Fraction, Decimal & Percentage Equivalence

Videos
Convert fluently between simple fractions, decimals and percentages
Represent fractions on number lines
Identify and use simple equivalent fractions
Convert fluently between fractions, decimals and percentages
Exercises
Convert fluently between simple fractions, decimals and percentages
Represent fractions on number lines
Identify and use simple equivalent fractions
Convert fluently between fractions, decimals and percentages

Spring term

Weeks 1-2 Solving Problems with Addition and Subtraction

Videos
Use formal methods for addition of integers
Use formal methods for subtraction of integers
Use formal methods for addition of decimals
Use formal methods for subtraction of decimals

Exercises
Use formal methods for addition of integers
Use formal methods for subtraction of integers
Use formal methods for addition of decimals
Use formal methods for subtraction of decimals

Weeks 3-5 Solving Problems with Multiplication and Division

Videos
Use formal methods to multiply integers
Use formal methods to multiply decimals
Use formal methods to divide integers
Use formal methods to divide decimals

Exercises
Use formal methods to multiply integers
Use formal methods to multiply decimals
Use formal methods to divide integers
Use formal methods to divide decimals

Weeks 6 Fractions and Percentages of Amounts

Videos
Find a Fraction of an Amount
Find a percentage of a given amount using mental methods
Find a percentage of a given amount using a calculator

Exercises
Find a Fraction of an Amount
Find a percentage of a given amount using mental methods
Find a percentage of a given amount using a calculator

Weeks 7-9 Operations and Equations with Directed Numbers

Videos
Add directed numbers
Subtract directed numbers
Multiplication and Division of directed numbers
Evaluate algebraic expressions with directed number

Exercises
Add directed numbers
Subtract directed numbers
Multiplication and Division of directed numbers
Evaluate algebraic expressions with directed number

Weeks 10-12 Addition and Subtraction of Fractions

Videos
Add and subtract fractions with the same denominator
Add and subtract fractions with any denominator

Exercise
Add and subtract fractions with the same denominator
Add and subtract fractions with any denominator

Summer term

Weeks 1-3 Constructing, measuring & using geometric notation

Videos

Understand angles as a measure of turn
Measure angles up to 180°
Draw angles up to 180°
Draw and measure angles between 180° and 360°
Construct triangles using SSS

Exercises

Understand angles as a measure of turn
Measure angles up to 180°
Draw angles up to 180°
Draw and measure angles between 180° and 360°
Construct triangles using SSS

Weeks 4-6 Developing Geometric Reasoning

Videos

Understand and use the sum of angles at a point
Understand and use the sum of angles on a straight line
Know and apply the sum of angles in a triangle
Know and apply the sum of angles in a quadrilateral

Exercises

Understand and use the sum of angles at a point
Understand and use the sum of angles on a straight line
Know and apply the sum of angles in a triangle
Know and apply the sum of angles in a quadrilateral

Weeks 7-8 Developing Number Sense

Videos

Use estimation as a method for checking mental calculations
Use known number facts to derive other facts

Exercises

Use estimation as a method for checking mental calculations
Use known number facts to derive other facts

Weeks 9-10 Sets and Probability

Videos
Identify and represent sets
Interpret and create Venn diagrams
Understand and use the intersection of sets
Understand and use the union of sets

Exercises
Identify and represent sets
Interpret and create Venn diagrams
Understand and use the intersection of sets
Understand and use the union of sets

Weeks 11-12 Prime Numbers and Proof

Videos
Recognise and identify prime numbers
Recognise square and triangular numbers
Find common factors of a set of numbers including the HCF
Find common multiples of a set of numbers including the LCM

Exercises
Recognise and identify prime numbers
Recognise square and triangular numbers
Find common factors of a set of numbers including the HCF
Find common multiples of a set of numbers including the LCM