# Curriculum Overview – MATHEMATICS Autumn Term

# **Etone College**Progress For All



#### YEAR 7

This term your child will be looking at place value, properties of number, arithmetic procedures and expressions and equations.

Over the course of the term your child will learn:

#### Place value

• Understand the value of digits in decimals, measure and integers

#### **Properties of number**

- Understand multiples
- Understand integer exponents and roots
- Understand and use the unique prime factorisation of a number

#### **Arithmetic procedures**

- Understand and use the structures that underpin addition and subtraction strategies
- Understand and use the structures that underpin multiplication and division strategies
- Use the laws and conventions of arithmetic to calculate efficiently

#### **Expressions and equations**

- Understand and use the conventions and vocabulary of algebra including forming and interpreting algebraic expressions and equations
- Simplify algebraic expressions by collecting like terms to maintain equivalence Manipulate algebraic expressions using the distributive law to maintain equivalence

#### YEAR 8

This term your child will be looking at estimation and rounding, linear sequences, graphical representations and solving linear equations

Over the course of the term your child will learn to;

### **Estimation and rounding**

- Round numbers to a required number of decimal places
- Round numbers to a required number of significant figures
- Estimate calculations by rounding

#### Sequences

- Understand the features of a sequence
- Recognise and describe arithmetic sequences

#### **Graphical representations of linear relationships**

- Connect coordinates, equations and graphs
- Explore linear relationships

#### **Solving linear equations**

- Understand what is meant by finding a solution to a linear equation
- Solve a linear equation with a single unknown on one side requiring one step
- Solve a linear equation with a single unknown on one side requiring two or more steps (no brackets)
- Solve efficiently a linear equation with a single unknown involving brackets

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## YEAR 9

This term your child will be looking at geometrical properties and probability

Over the course of the term your child will learn to;

### **Geometrical properties**

- Understand and use similarity and congruence
- Understand and use Pythagoras' theorem

### **Probability**

- Explore, describe and analyse the frequency of outcomes in a range of situations
- Systematically record outcomes to find theoretical probabilities
- Calculate and use probabilities of single and combined events

#### **Non-linear relationships**

• Recognise and describe other types of sequences (non-arithmetic)