# Rationale

At New Avenue School, our Maths curriculum is built on the White Rose Maths framework, chosen for its structured and supportive approach to developing a deep understanding of mathematics. This framework aligns with our commitment to addressing the diverse needs of our pupils, including those with skills or knowledge gaps. Through its small-step, masterybased approach, the curriculum allows pupils to build confidence and a positive relationship with mathematics. The use of concrete materials and visual aids makes abstract concepts more accessible, creating a supportive learning environment.

# **Curriculum Phases**

Our Maths curriculum is divided into four key phases to ensure structured progression:

- Phase 1: Emphasis on foundational skills, covering place value, basic operations, and introductory geometry.
- Phase 2: Builds on foundational skills with fractions, decimals, basic algebra, and more complex geometry concepts.
- Phase 3: Expands into advanced topics, including algebraic expressions, ratios, probability, and further geometry.
- Phase 4: Prepares pupils for GCSE-level mathematics with trigonometry, simultaneous equations, probability, and data handling.

# Maths - Curriculum Overiew

Phase 1 - Summer Term Introduces concepts of money, time, and

shapes, reinforcing measurement skills. Statistics is introduced as pupils learn to interpret simple data, and further practice with fractions consolidates understanding.

## Phase 1 - Spring Term

Builds on previous knowledge with multiplication and division strategies, along with introductory geometry covering length and perimeter. Pupils explore fractions and basic concepts of mass and capacity.

# Phase 2 - Autumn Term

Continues to develop arithmetic skills with units on place value, addition, subtraction, and introductory fractions. Basic multiplication and division strategies are reinforced, enhancing pupils' fluency with numbers.

## Phase 2 - Spring Term

Focuses on deeper understanding of multiplication and division, alongside more complex fractions, decimals, and percentages. Pupils also explore perimeter, area, and introductory statistics.

#### Phase 3 - Summer Term

Introduces geometric reasoning, covering construction and measurement, and develops number sense. Topics also include probability, prime numbers, and mathematical proof, laying groundwork for abstract thinking.

#### Phase 3 - Spring Term

Focuses on arithmetic problem-solving, fractions, percentages, and operations with directed numbers. Pupils gain confidence in addition and subtraction of fractions, preparing them for more advanced arithmetic.

### Phase 4 - Autumn Term

Covers advanced geometry, including congruence, similarity, enlargement, and trigonometry. Pupils learn to represent equations and inequalities and begin solving simultaneous equations, preparing for higherlevel algebra.

#### Phase 4 - Spring Term

Focuses on angles, bearings, and circle theorems, alongside an introduction to vectors. Pupils also explore complex ratios, fractions, percentages, and probability concepts, deepening their mathematical understanding.

# Phase 1 - Autumn Term

Focus on foundational skills with units on place value, addition, subtraction, and early multiplication and division concepts. Pupils gain confidence in basic arithmetic, setting the groundwork for more complex mathematical concepts.

# Phase 2 - Summer Term

Expands into geometry, covering shape properties, position, direction, and introduces concepts of negative numbers, unit conversions, and volume, providing a comprehensive foundation for later phases.

# Phase 3 - Autumn Term

Begins with sequences and the fundamentals of algebraic notation, equality, and equivalence.
Pupils delve into place value for integers and decimals, and explore the relationships
between fractions, decimals, and percentages.

# Phase 4 - Summer Term

Introduces data collection and interpretation, including frequency tables, histograms, and scatter plots. Non-calculator methods are emphasized, alongside sequences, indices, roots, and algebraic manipulation, preparing pupils for GCSE-level problem-solving.