Year 5

Subject Name:	Maths

Curriculum Intent Statement

Our curriculum will encourage pupils to be efficient, resilient problem solvers, able to apply their mathematical skills to any real life context they encounter after leaving the academy.

Through learning mathematics, our pupils will develop the logical thinking skills to break problems in a wide range of contexts into manageable steps.
Pupils will embrace the interconnected nature of the concepts within mathematics and how mathematics can be applied to contexts within everyday life, academia and careers. Their mathematical skills and knowledge will open doors for our pupils to select whichever future path they choose.

Autumn Term 1

Number and place value

- Read, write, order and compare numbers to at least 1 000 000
- Interpret negative numbers in context
- Round any number up to 1 000 000

Addition and subtraction

- Add and subtract whole numbers with more than 4 digits
- Add and subtract numbers mentally with increasingly large numbers
- Use rounding to check answers to calculations
- Solve addition and subtraction multi-step problems in contexts

Multiplication and division

- Identify multiples and factors
- Prime numbers, prime factors and composite (non-prime) numbers
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method
- Divide numbers up to 4 digits by a one-digit number using short division
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Time

- Solve problems involving converting units of time

Autumn Term 2

Fractions, decimals and percentages

- Compare and order fractions whose denominators are all multiples of the same number
- Identify, name and write equivalent fractions, including tenths and hundredths
- Recognise mixed numbers and improper fractions and convert from one form to the other
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Read and write decimal numbers as fractions

Shape

- Measure and calculate the perimeter of composite and rectilinear shapes
- Calculate and compart the area of rectangles

Length and mass

- Convert between different unit of measure

Volume and capacity

- Estimate volume

Statistics

- Solve comparison, sum and difference problems using information presented in a line graph
- Complete, read and interpret information in tables, including timetables

Spring Term 1

Number and place value

- Solve number problems and practical problems
- Read Roman numerals to 1000 and recognise years.

Multiplication and division

- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method
- Divide numbers up to 4 digits by a one-digit number using short division
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Fractions decimals and percentages

- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Read, write, order and compare numbers with up to three decimal places
- Solve problems involving number up to three decimal places
- Write percentages as a fraction with denominator 100, and as a decimal

Spring Term 2

Money

- Solve problems involving money, using the four operations

Time

- Solve problems involving converting units of time

Position and direction

- Identify, describe and represent the position of a shape following a reflection or translation

Shape

- Identify 3-D shapes
- Estimate and compare acute, obtuse and reflex angles
- Draw given angles, and measure them in degrees
- Identify angles

Summer Term 1

Number and place value

- Read, write, order and compare numbers to at least 1 000 000
- Interpret negative numbers in context
- Round any number up to 1 000 000
- Read Roman numerals to 1000
- Solve number problems

Multiplication and division

- Identify multiples and factors
- Prime numbers, prime factors and composite (non-prime) numbers
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method
- Divide numbers up to 4 digits by a one-digit number using short division
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Fractions decimals and percentages

- Compare and order fractions whose denominators are all multiples of the same number
- Identify, name and write equivalent fractions, including tenths and hundredths
- Recognise mixed numbers and improper fractions and convert from one form to the other
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Read and write decimal numbers as fractions

Summer Term 2

Statistics

- Solve comparison, sum and difference problems using information presented in a line graph
- Complete, read and interpret information in tables, including timetables.

Position and direction

- Identify, describe and represent the position of a shape following a reflection or translation

Shape

- Identify 3-D shapes
- Estimate and compare acute, obtuse and reflex angles
- Draw given angles, and measure them in degrees
- Identify angles

Volume and capacity

- Estimate volume

Length and mass

- Convert between different units of metric measure
- Convert metric and imperial units of measure
- Measure and calculate the perimeter of composite rectilinear shapes
- Calculate and compare the area of rectangles

Money

- Solve problems involving money, using the four operations