MATHS

Warden Hill PRIMARY SCHOOL

Curriculum Progression Map

Intent

At Warden Hill we aim for all pupils to:

- Belong to our community and develop the knowledge, skills and understanding in mathematics, which will be required in further study and adult life
- Belong to our houses in our inter-house maths cup, raising the profile and enjoyment of maths
- Explore their love of maths
- Explore maths as a tool to solve varied and challenging problems in a real life context
- Explore engaging tasks to develop lively and enquiring minds that strive for excellence
- Explore mathematical vocabulary to explain their reasoning
- Explore the cross curriculum links and how maths can be used in science and other subjects
- Succeed through a 'can do', positive and independent attitude enabling all children to do the very best they can

Implementation

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• Understand in depth, numbers to 10 (including some number bonds to 10) • Recognise patterns within the number system • Compare quantities in different contexts • Explore measuring through practical experiences • Look for and create patterns using shapes and objects, developing spatial reasoning	• Read, write, count forward and back to 100 • 1 more and 1 less • Count in 2,5 and 10s • Represent numbers using concrete and pictorial methods • Read, write and interpret mathematical operations • +/-within 20 • Represent x/÷ using picture methods • Recognise half and quarters of	• Count in 2,3,5 and 10s (from any number) • Place value to 100 • +/- within 100 • x/÷ with a 2,5 and 10s focus • Simple equivalences of fractions • Knowledge of ½,1/3,1/4, 2/4,3/4 • Measurement using appropriate standard units • Making amounts of money in different ways	• Count in multiples of 4,8,50 and 100 • Place value to 100 • Read and write numbers to 1000 • +/- up to 3 digits • x/÷ of a 2-digit and a 1-digit number. • +/- fractions with the same denominator • Recognise 1/10 • Measure, compare, and calculate standard units • Find the perimeter of 2d shapes	• Count backwards through zero including negative numbers • Count in multiples of 6,7,9,25 and 1000. • Place value to 1000 including rounding and Roman numerals to 100 • Recognise place value columns to 2 dp and round to 1dp • +/- up to 4 digits. • Estimating and using inverse operations • x/÷ to 12x12	• Place value including rounding to 1000000 • +/- using mental and written methods with large numbers • Identify all multiples and factors • Prime and composite numbers. • x/÷ mentally • x/÷ 4 digit numbers by up to 2 digit numbers • x/÷ decimals by the power 10	• Place value 10000000 including negative numbers • Multi-step problems using the four operations • Identify common factors and multiples • Use formal, long and short written methods to calculate multiplication and division • Understand the relationships of fractions,

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• Develop a 'have a go attitude' when solving problems, persevering when challenges occur	numbers and shape • Recognition of money denominations • Introduction to length, mass and capacity • Tell the time to o'clock and half past • Sequence events using time language • Understand turns and positional language • Recognise 2d and 3d shapes	• Tell the time to quarter to and quarter past • Properties of 2d and 3d shapes including symmetry • Understand turns and positional language • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	• Money in practical contexts • Tell the time using analogue and digital clocks • Introduction to different angles and lines • Interpret and present data using different charts •	• Multiply 2 and 3-digit numbers by a 1-digit number • Recognise and write fraction and decimal equivalents • Estimate, calculate and convert different measures • Calculate perimeter and area of a shape • Read, write and convert time on a 24-hour clock • Compare and classify shapes including principles of symmetry • Identify and compare different angles • Interpret and present data using appropriate method	• Recognise Square and cube numbers • Recognise place value columns to 3 dps. • Use mixed number and improper fractions • Multiply fractions by whole numbers • Round a number with two dps to the nearest whole number and one dp. • Introduction to percentages and their relationship to fractions and decimals • Compare metric and imperial measures • Calculate area and perimeter of compound shapes • Reflection and transition of shapes	decimals and percentages • Use the four operations when working with fractions • Understand and apply ratios and proportion • Introduction to algebra • Convert units of measurement • Calculate area and perimeter of parallelograms and triangles • Interpret and construct line graphs and pie charts • Understand mean as an average

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Impact

By the end of Year 6 your child will be able to:

- Apply the principles of mathematics to problem solving, logical and critical thinking and making informed choices.
- Apply their reasoning skills to effectively communicate their point to others during debates or teamwork. These reasoning skills support their thinking and aid communication.
- Apply their knowledge of money to support spending, budgeting and understand the value of money.
- Apply their confidence in mathematics to the broad range of opportunities at secondary school that draw on mathematical skills (Design and Technology, Food Technology, ICT, Textiles, Art etc.)
- Apply their knowledge of fractions and measurement to make them more successful at practical tasks like cooking and designing.
- Apply their knowledge of mathematical operations to stay fit and healthy, understanding and calculating food requirements.
- Apply their knowledge of time to everyday life and understand how time management can make them more efficient and organised individuals.
- Apply the skills needed for data handling to understand, present and interpret information that will allow them to make informed choices such as using a public transport timetable or their lesson planner in secondary school.
- Apply their understanding of data handling to spot patterns in information.
- Apply their knowledge of Shapes to help identify differences, improve categorisation and develop practical skills in science and DT.
- Apply their understanding of ratio and proportion to creative tasks such as colour mixing and appreciating the beauty in nature and their surroundings.