

Maths Curriculum

At The Duston School, we use the White Rose Maths Scheme, which offers a framework to teach the Mathematics Programme of Study as laid out by the National Curriculum and the Statutory Framework for the Early Years Foundation Stage.

From the early years, we develop a positive attitude towards Mathematics and proficiency in Mathematical concepts and skills which is vital for engaging successfully with the real world. We provide a Mathematics curriculum that balances acquiring rapid fluency alongside opportunities to apply reasoning skills in various problem-solving contexts. Each classroom environment is set up to enable children to build independence in their mathematical learning, from up-to-date working walls, carefully chosen scaffolds and accessible resources.

The aim of our mathematics curriculum is to ensure that all children:

- become fluent in the fundamentals of Mathematics
- frequently practice increasingly complex problems over time, ensuring that children can apply their knowledge across a range of problem-solving questions
- reason mathematically by following a line of enquiry and developing an argument or justification
- use correct Mathematical vocabulary confidently and in context
- talk positively and knowledgeably about their Mathematical learning

Curriculum Map and Key Knowledge Goals						
EYFS						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Match, Sort and Compare Count a set. Compare amounts. Talk about measures and pattern Compare size, mass and capacity.	It's me 1, 2, 3 (1,2,3,4,5) Recognise numerals to 5. Subitise to 5. Find one more and less. Shape Name common 2D shapes.	Alive 5 (Growing 6,7,8) Subitise to 8. Recognise numerals to 8. Measures Compare length and height. Order and sequence time.	Building 9 and 10 Compare to 10. Represent to 10. Recall number bonds within 10. Shape Name 3D shapes.	To 20 and Beyond Count beyond 20. How many now? Solve addition and subtraction. Manipulate, compose and decompose Recognise 2D shapes in 3D.	Sharing and Grouping Share amounts equally. Recognise odd and even. Visualise, build and map Repeating patterns. Describe positions.
Key Stage 1						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Place Value Count objects, actions and sounds. Compare numbers. Count on from any number.	Addition and Subtraction Recall number bonds within 10. Write number sentences. Shape Name and sort 2D and 3D shapes.	Place Value Numbers to 20. One more and less to 20. Addition and Subtraction Count on. Know doubles to 20. Subtract by counting back.	Place Value (to 50) Tens and ones. Make groups of ten. Measure Length in centimetres. Compare measures,	Multiplication Multiples of 2, 5 and 10. Know doubles to 20. Fractions Recognise half and quarter. Position and Direction Position	Place Value (to 100) Numbers with the same tens. Money Notes and coins. Time Recite days and months. Time to half hr.
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 2	Place Value Flexibly partition numbers to 100. Addition and Subtraction Recall number bonds to 20. Recall number bonds to 100.	Addition and Subtraction Add and subtract when crossing a 10. Shape Properties of 2D and 3D shapes. Lines of symmetry.	Money Amounts using different coins. Solve 2 step problems. Multiplication and Division Solve x problems. Recall x 2, 5 and 10.	Length and Height Compare measures. Mass, Capacity and Temperature Measure in g, kg and ml. Compare measures.	Fractions Recognise half, quarter, a third and three quarters of a shape and amount. Time Tell the time to the nearest 5 minutes.	Statistics Interpret tallies, block graphs and pictograms. Represent data in graph form. Position and Direction Describe movement and turns.

	Lower Key Stage 2					
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Place Value Flexibly partition to 1000. 1, 10 or 100 more or less. Addition and Subtraction Add and subtract 3-digit numbers crossing 100.	Multiplication and Division A Recite and multiply and divide by 3, 4 and 8. Use an array to help multiply and divide.	Multiplication and Division B Multiply a 2-digit number by a 1-digit number with exchange. Length and Perimeter Measure in mm, cms and m. Measure perimeter.	Fractions A Compare and order unit and non-unit fractions. Mass and Capacity Measure and compare in g, kg, l and ml.	Fractions B Add and subtract fractions. Money Add and subtract amounts. Convert pounds and pence. Time Time to the minute.	Time Use a.m. and p.m. correctly. Shape Recognise right angles. Parallel and perpendicular in shapes. Statistics Pictograms and bar charts
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 4	Place Value Flexibly partition numbers to 10,000. Find 1,10,100 and 1000 more or less. Addition and Subtraction Add and subtract 1s,10s, 100s and 1000s.	Addition and Subtraction Add and subtract two 4-digit numbers with exchanges. Area Calculated area. Multiplication and Division A Multiply and divide by 6, 7 and 9. Recall times-tables to 12x12.	Multiplication and Division B Recognise factor pairs. Multiply and divide a 3-digit number by a 1-digit number. Length and Perimeter Calculate the perimeter..	Fractions Convert mixed numbers to improper fractions. Decimals A Divide by 10 and 100. Recognise tenths and hundredths as fractions and decimals.	Decimals B Flexibly partition decimals. Money Compare amounts of money. Time Convert between 12 and 24 hour clock.	Shape Angles in shapes. Identify lines of symmetry. Statistics Charts and line graphs. Position and Direction Coordinates and translation on a grid.
	Upper Key Stage 2					
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	Place Value Partition numbers to 1,000.000. Round to the nearest 10, 100, or 1,000. Addition and Subtraction Solve multi-step addition and subtraction problems with numbers with more than 4 digits.	Multiplication and Division Common factors, prime numbers, square numbers and cube numbers. Fractions A Add and subtract fractions with the same denominator. Add two mixed number fractions.	Multiplication and Division B Multiply 4-digit number by a 2-digit number. Divide a 4-digit number by a 1-digit number. Fractions B Multiply a unit and non-unit fractions. Calculate fractions of a quantity and an amount.	Decimals and Percentages Compare any decimals with up to 3 decimal places. Understand percentages. Perimeter and Area Area of compound shapes. Statistics Tables and timetables.	Shape Angles around a point and on a straight line. Regular and irregular polygons. Position and Direction Translation and coordinates. Decimals Add and subtract decimals.	Negative Numbers Compare and order negative numbers. Converting Units Convert between metric and imperial. Convert units of time. Volume Estimate and compare volume and capacity.
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 6	Place Value Compare and order any integers. Round any integer. Addition, Subtraction, multiplication and Division Know how to do long division with remainders. Use mental calculations and estimations.	Fractions A Add and subtract any two fractions. Fractions B Multiply fractions by fractions. Divide any fraction by an integer. Converting Units Convert Metric Units.	Ratio Use scale factors. Solve proportion problems. Algebra Solve two step equations. Find pairs of values. Decimals Multiply and divide decimals by integers.	Fractions, Decimals and Percentages Convert fractions to percentages. Area, Perimeter and Volume Area of a 2-D shape and the volume of a cuboid. Statistics Interpret Pie charts with percentages.	Shape Calculate angles in 2-D shapes. Recognise the nets of 3-D shapes. Geometry Recognise and draw translations and reflections in four quadrants.	Consolidation and project