

Mathematics Mastery Unit-Video Pairings

This document details the videos we think are most appropriate for each Mathematics Mastery unit. We recommend releasing **one video every fortnight**, to allow parents time to watch and complete the activities with their child. Please choose the video you feel is most appropriate for your pupils.

Reception

The Maths with Parents videos in Reception focus on composition of numbers to 10. Whilst the Mathematics Mastery Programme of Study goes beyond this, we believe it is helpful for parents to continue to embed an understanding of the foundations of number.

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Early mathematical experiences	<ul style="list-style-type: none"> Groups with the same number of things 	<ul style="list-style-type: none"> Number card PDF Teddy bear's picnic materials Dry pasta
		<ul style="list-style-type: none"> More than or less than 	<ul style="list-style-type: none"> Dry pasta Sticks
		<ul style="list-style-type: none"> Comparing numbers 	<ul style="list-style-type: none"> Number cards PDF Dry pasta
	Pattern and early number	<ul style="list-style-type: none"> Repeating patterns AB 	<ul style="list-style-type: none"> Objects with which to make patterns Objects with which to make patterns
		<ul style="list-style-type: none"> ABB or AAB 	<ul style="list-style-type: none"> Coloured pens to make patterns
		<ul style="list-style-type: none"> Number 1 	
		<ul style="list-style-type: none"> Number 2 	<ul style="list-style-type: none"> Pairs of socks
	Numbers within 6	<ul style="list-style-type: none"> Numbers within 2 	<ul style="list-style-type: none"> Number cards PDF
		<ul style="list-style-type: none"> Number 3 	<ul style="list-style-type: none"> Sticks/pencils to make triangles
	Addition and subtraction within 6	<ul style="list-style-type: none"> Numbers within 3 	<ul style="list-style-type: none"> Number cards PDF Beanbags/paper balls
		<ul style="list-style-type: none"> One more by counting 	<ul style="list-style-type: none"> Teddies/action figures Picnic items Elephant PDF
	Measure	<ul style="list-style-type: none"> One fewer by counting 	<ul style="list-style-type: none"> Frog cut-out PDF Toys Picnic items
<ul style="list-style-type: none"> Comparing amounts 		<ul style="list-style-type: none"> Play dough or alternative Cups and water 	

	Shape and sorting	<ul style="list-style-type: none"> • Properties of shape 	<ul style="list-style-type: none"> • Fruit/veg in a bag
		<ul style="list-style-type: none"> • Positions 	<ul style="list-style-type: none"> • Positions PDF
		<ul style="list-style-type: none"> • Directions 	
	Calendar and time	<ul style="list-style-type: none"> • Using time 	
Spring term	Numbers within 10	<ul style="list-style-type: none"> • Number 4 	<ul style="list-style-type: none"> • Sticks/pencils to make squares and rectangles • Objects to use as counters
		<ul style="list-style-type: none"> • Numbers within 4 	<ul style="list-style-type: none"> • Number cards PDF • Teddies and paper to make hats
		<ul style="list-style-type: none"> • Number 5 	<ul style="list-style-type: none"> • Play dough or alternative • Paints/sauces • Grapes/pasta
	Addition and subtraction within 10	<ul style="list-style-type: none"> • Numbers within 5 	<ul style="list-style-type: none"> • Number cards PDF • Currant buns PDF • Paints/sauces
		<ul style="list-style-type: none"> • Number 6 	<ul style="list-style-type: none"> • Insect PDF • Empty egg box
		<ul style="list-style-type: none"> • Numbers within 6 	<ul style="list-style-type: none"> • Number cards PDF • Beanbags/paper balls
	Numbers within 15	<ul style="list-style-type: none"> • Number 7 	<ul style="list-style-type: none"> • Objects to count to 7
		<ul style="list-style-type: none"> • Numbers within 7 	<ul style="list-style-type: none"> • Number cards PDF • Teddies/action figures
	Grouping and sharing	<ul style="list-style-type: none"> • Sharing fairly 	<ul style="list-style-type: none"> • Teddy bear's picnic materials • Banana
	Numbers within 20	<ul style="list-style-type: none"> • Number 8 	<ul style="list-style-type: none"> • Octopus PDF
<ul style="list-style-type: none"> • Numbers within 8 		<ul style="list-style-type: none"> • Numbers cards PDF • Eight empty bottles and a bowling ball 	
Double and half	<ul style="list-style-type: none"> • Double and half 	<ul style="list-style-type: none"> • 	
Summer term	Shape and pattern	<ul style="list-style-type: none"> • ABC 	
		<ul style="list-style-type: none"> • Patterns in a loop 	<ul style="list-style-type: none"> • Sticks/leaves for making patterns
	Addition and subtraction	<ul style="list-style-type: none"> • Number 9 	<ul style="list-style-type: none"> • Objects to count to 9
<ul style="list-style-type: none"> • Numbers within 9 		<ul style="list-style-type: none"> • Number cards PDF • Beanbags/paper balls 	

	Money	<ul style="list-style-type: none"> Exploring money 	<ul style="list-style-type: none"> Different denominations of coin or cut-outs
	Measures	<ul style="list-style-type: none"> Size and number of units 	<ul style="list-style-type: none"> A jug and cup or similar
		<ul style="list-style-type: none"> Estimating and predicting 	<ul style="list-style-type: none"> A bowl Pencil and paper
	Depth of numbers within 20	<ul style="list-style-type: none"> Number 10 	<ul style="list-style-type: none"> Paints/sauces Objects to count to 10
		<ul style="list-style-type: none"> Numbers within 10 	<ul style="list-style-type: none"> Number cards PDF 10 empty bottles
Numbers beyond 20	<ul style="list-style-type: none"> Choose an appropriate Year 1 video 		

Year 1

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Numbers to 10	<ul style="list-style-type: none"> Counting in ones 	<ul style="list-style-type: none"> At the races PDF Small toys
		<ul style="list-style-type: none"> Number bonds to 10 	<ul style="list-style-type: none"> Household items to use as counters
	Addition and subtraction within 10	<ul style="list-style-type: none"> Number bonds within 10 	<ul style="list-style-type: none"> Toys
	Shapes and patterns	<ul style="list-style-type: none"> Recognising 2-D and 3-D shapes 	<ul style="list-style-type: none"> Household objects to draw around/make a tower
	Numbers to 20	<ul style="list-style-type: none"> Numbers below 20 	<ul style="list-style-type: none"> Household items to use as counters
	Addition and subtraction within 20	<ul style="list-style-type: none"> Doubling and halving within 20 	<ul style="list-style-type: none"> Household items to use as counters Bingo PDF
<ul style="list-style-type: none"> Addition and subtraction by making 10 		<ul style="list-style-type: none"> Household items to use as counters 	
Sp	Time	<ul style="list-style-type: none"> O'clock and half past 	<ul style="list-style-type: none"> Clock PDF

	Exploring calculation strategies within 20	<ul style="list-style-type: none"> Solving addition and subtraction problems 	
	Numbers to 50	<ul style="list-style-type: none"> 2-digit place value 	<ul style="list-style-type: none"> 100 counters
	Adding and subtracting within 50	<ul style="list-style-type: none"> Addition and subtraction of 1s or 10 	<ul style="list-style-type: none"> A bead string (or resources to make one)
	Fractions	<ul style="list-style-type: none"> Halves and quarters 	<ul style="list-style-type: none"> Teddy bear's picnic items Shape template PDF
	Measures (1): Length and mass	<ul style="list-style-type: none"> Introduction to length 	<ul style="list-style-type: none"> Counters for measuring
Summer term	Numbers 50 to 100 and beyond	<ul style="list-style-type: none"> Ordering and comparing 2-digit numbers 	<ul style="list-style-type: none"> Number line PDF
	Adding and subtracting within 100	<ul style="list-style-type: none"> Addition and subtraction of 1s, with regrouping 	<ul style="list-style-type: none"> Resources to make a bead string 100 counters
	Money	<ul style="list-style-type: none"> Introduction to money 	<ul style="list-style-type: none"> 100 pennies OR pennies PDF
	Multiplication and division	<ul style="list-style-type: none"> Multiplication by repeated addition 	<ul style="list-style-type: none"> Sticks, straws or pens Items to use as counters
		<ul style="list-style-type: none"> Division by sharing 	<ul style="list-style-type: none"> 24 sticks (or straws or pencils) Items to use as counters
Measures (2): Capacity and volume	<ul style="list-style-type: none"> Introduction to volume and capacity 	<ul style="list-style-type: none"> 5 glasses or cups Different sized cups/jugs 	

Year 2

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Numbers within 100	<ul style="list-style-type: none"> 2-digit place value 	<ul style="list-style-type: none"> 100 counters
	Add and subtract 2-digit numbers	<ul style="list-style-type: none"> Addition and subtraction of 10s and 1s, without regrouping 	<ul style="list-style-type: none"> Resources to make a bead string
	Addition and subtraction word problems	<ul style="list-style-type: none"> Addition and subtraction word problems using bar models 	<ul style="list-style-type: none"> Coloured paper or paper to colour in
	Measuring length	<ul style="list-style-type: none"> Measuring length 	

	Graphs	<ul style="list-style-type: none"> Block diagrams and pictograms 	<ul style="list-style-type: none"> Weather Watchers PDF
	Multiplication and division by 2, 5 and 10	<ul style="list-style-type: none"> Fact families for multiplication and division 	<ul style="list-style-type: none"> Counters Snap cards PDF
		<ul style="list-style-type: none"> Division by grouping and sharing 	<ul style="list-style-type: none"> 24 counters Teddy Bear's Picnic items
Spring term	Time	<ul style="list-style-type: none"> Time to the nearest 5 minutes 	<ul style="list-style-type: none"> Analogue clock PDF
	Fractions	<ul style="list-style-type: none"> Fractions of quantity and shape 	
	Addition and subtraction of 2-digit numbers (regrouping and adjusting)	<ul style="list-style-type: none"> Addition and subtraction of 10s and 1s, with regrouping 	<ul style="list-style-type: none"> Column cards PDF
		<ul style="list-style-type: none"> Addition and subtraction of near multiples 	
	Money	<ul style="list-style-type: none"> Money – change 	
	Faces, shapes and patterns; lines and turns	<ul style="list-style-type: none"> Properties of 2-D and 3-D shapes 	<ul style="list-style-type: none"> Recyclable household objects to build a spaceship
Summer term	Numbers within 1000	<ul style="list-style-type: none"> 3-digit place value 	
	Measures: capacity and volume	<ul style="list-style-type: none"> Measuring capacity and volume 	<ul style="list-style-type: none"> Measuring jug
	Measures: mass	<ul style="list-style-type: none"> Measuring mass 	<ul style="list-style-type: none"> Weighing scales
	Exploring calculation strategies	<ul style="list-style-type: none"> 2-digit column addition, with regrouping 	
		<ul style="list-style-type: none"> 2-digit column subtraction, with regrouping 	
Multiplication and division by 3 and 4	<ul style="list-style-type: none"> Multiplication and division word problems using bar models 	<ul style="list-style-type: none"> 24 counters 	

Year 3

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Number sense and exploring calculation strategies	• Choosing addition strategies	• Column cards PDF
		• Choosing subtraction strategies	• Sneaky subtraction PDF
	Place Value	• Addition and subtraction of 1, 10 or 100	
		• Rounding to 10s or 100s	• Rounding pairs download
	Graphs	• Tallies, pictograms and bar charts	• Data dilemma PDF
	Addition and subtraction	• Choosing a method for 3 digit addition	
• Choosing a method for 3 digit subtraction			
Length and perimeter	• Measuring using centimetres and millimetres	• Ruler	
Spring term	Multiplication and division	• Fact families for multiplication and division	• Counters • Fact Family Snap PDF
	Deriving multiplication and division facts	• Multiplication and division by 10	
		• Multiplication of 2 digit numbers by 3 and 4	
	Time	• Telling the time to the nearest minute	• Clock Face PDF
	Fractions	• Unit fractions of quantities	• Biscuits and decorations
• Ordering fractions		• Fractions Top Trumps PDF	
Summer term	Angles and shapes	• Introduction to angles	• Card/paper and scissors
		• Perpendicular and parallel lines	
	Measures	• Measuring and comparing mass	

		<ul style="list-style-type: none"> Measuring and comparing volume 	<ul style="list-style-type: none"> Bottles Juice
	Securing multiplication and division	<ul style="list-style-type: none"> Exploring the 3 and 6 multiplication tables 	<ul style="list-style-type: none"> Counters 3 and 6 times table snap PDF
	Exploring calculation strategies and place value	<ul style="list-style-type: none"> 4 digit place value 	

Year 4

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Reasoning with 4-digit numbers (2)	<ul style="list-style-type: none"> Rounding to 10s, 100s or 1000s 	<ul style="list-style-type: none"> Rounding Pairs PDF
	Addition and subtraction (3)	<ul style="list-style-type: none"> 4 digit column addition 4 digit column subtraction 	
	Multiplication and division (3)	<ul style="list-style-type: none"> 3 digit by 1 digit multiplication Division by partitioning, answers under 30 	
	Discrete and continuous data (2)	<ul style="list-style-type: none"> Introduction to line graphs 	
Spring term	Securing multiplication facts	<ul style="list-style-type: none"> Exploring the 2, 4 and 8 multiplication tables 	<ul style="list-style-type: none"> Double or half PDF Counters
	Fractions	<ul style="list-style-type: none"> Equivalent fractions and simplifying 	<ul style="list-style-type: none"> Snap! PDF
		<ul style="list-style-type: none"> Improper fractions 	<ul style="list-style-type: none"> Pens and paper
	Time	<ul style="list-style-type: none"> Understanding the 24 hour clock 	<ul style="list-style-type: none"> Pairs! PDF
	Decimals	<ul style="list-style-type: none"> Place value with tenths 	<ul style="list-style-type: none"> Paper and pens
<ul style="list-style-type: none"> Rounding decimals to the nearest whole number 		<ul style="list-style-type: none"> Rounding Pairs PDF 	
Area and perimeter	<ul style="list-style-type: none"> Area of rectangles by counting squares 	<ul style="list-style-type: none"> Post-it notes or squares of paper 	
Sum	Solving measure and money problems	<ul style="list-style-type: none"> Converting measures, with decimals 	<ul style="list-style-type: none"> Pairs! PDF

	Shape and symmetry	<ul style="list-style-type: none"> Line symmetry 	
	Position and direction	<ul style="list-style-type: none"> Plot coordinates and translate 	<ul style="list-style-type: none"> Battleships PDF
	Reasoning with patterns and sequences	<ul style="list-style-type: none"> Roman numerals to 100 	<ul style="list-style-type: none"> Pens, pencils, dry spaghetti or similar to practise making Roman numerals Roman Bingo PDF
	3-D shape	<ul style="list-style-type: none"> Teacher's choice based on need 	

Year 5

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Reasoning with large whole numbers	<ul style="list-style-type: none"> 5 and 6 digit place value 	<ul style="list-style-type: none"> Paper and pens
		<ul style="list-style-type: none"> 5+ digit rounding 	<ul style="list-style-type: none"> Paper and pens
	Integer addition and subtraction	<ul style="list-style-type: none"> 5+ digit column addition 	
		<ul style="list-style-type: none"> 5+ digit column subtraction 	
	Line graphs and timetables	<ul style="list-style-type: none"> Reading and interpreting line graphs 	
	Multiplication and division	<ul style="list-style-type: none"> Factors and multiples 	
<ul style="list-style-type: none"> 4 digit by 1 digit short multiplication (sharing model) 			
Perimeter and area	<ul style="list-style-type: none"> Perimeter of composite shapes 		
Spring term	Fractions and decimals	<ul style="list-style-type: none"> Place value with thousandths 	
		<ul style="list-style-type: none"> Converting between mixed and improper fractions 	<ul style="list-style-type: none"> Ingredients for baking activity (alternatively, families can work out the measurements without making the recipe)
	Angles	<ul style="list-style-type: none"> Acute, obtuse and reflex angles in degrees 	<ul style="list-style-type: none"> Paper, pencil, scissors
	Fractions and percentages	<ul style="list-style-type: none"> Introduction to percentages 	<ul style="list-style-type: none"> Percentage Puzzle PDF

Summer term	Transformations	<ul style="list-style-type: none"> • Translation and reflection on a coordinate grid 	<ul style="list-style-type: none"> • Coordinate Grid PDF
	Converting units of measure	<ul style="list-style-type: none"> • Converting lengths 	<ul style="list-style-type: none"> • A tape measure or long ruler and sticky notes
	Calculating with whole numbers and decimals	<ul style="list-style-type: none"> • Column addition with decimals 	
		<ul style="list-style-type: none"> • Column subtraction with decimals 	
	2-D and 3-D shape	<ul style="list-style-type: none"> • Regular and irregular 2-D shapes 	<ul style="list-style-type: none"> • Pen and paper • Ruler and protractor
	Volume	<ul style="list-style-type: none"> • Estimating volume and capacity 	<ul style="list-style-type: none"> • Different sized containers, i.e. jugs, bowls, glasses
Calculating with whole numbers and decimals	<ul style="list-style-type: none"> • Teacher's choice based on need 		

Year 6

	Mathematics Mastery Unit	Suggested Maths with Parents video(s)	Resources needed
Autumn term	Integers and decimals	<ul style="list-style-type: none"> • 7 and 8 digit place value 	
	Multiplication and division	<ul style="list-style-type: none"> • Common factors and common multiples 	
		<ul style="list-style-type: none"> • 4 digit by 2 digit long multiplication 	
		<ul style="list-style-type: none"> • 4 digit by 2 digit long division 	
	Calculation problems	<ul style="list-style-type: none"> • Order of operations 	
	Fractions	<ul style="list-style-type: none"> • Addition and subtraction of fractions with different denominators 	
<ul style="list-style-type: none"> • Comparing fractions with different denominators 		<ul style="list-style-type: none"> • Higher or Lower PDF 	
Missing angles and lengths	<ul style="list-style-type: none"> • Missing angles on a line or at a point 	<ul style="list-style-type: none"> • Protractor, pens and paper 	
Sp	Coordinates and shape	<ul style="list-style-type: none"> • Coordinates 	<ul style="list-style-type: none"> • Coordinate Bingo PDF

Fractions	<ul style="list-style-type: none"> • Multiplication of fractions 	
Decimals and measures	<ul style="list-style-type: none"> • Area of parallelograms 	<ul style="list-style-type: none"> • Parallelogram Patterns PDF • Spot the Parallelogram PDF
	<ul style="list-style-type: none"> • Area of triangles 	<ul style="list-style-type: none"> • 3 in a Row PDF
Percentages and statistics	<ul style="list-style-type: none"> • Fraction, decimal and percentage equivalents 	<ul style="list-style-type: none"> • Fraction Match PDF
Proportion problems	<ul style="list-style-type: none"> • Introduction to ratio and proportion 	