

Grayshott Primary Maths Curriculum 2024/25

Intent Statement

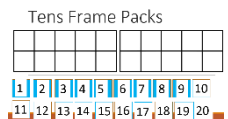
Why do we teach this? Why do we teach it in the way we do?

At Grayshott, we believe in the teaching of a maths curriculum that fosters a love and joy of the subject. We believe in delivering a maths curriculum that builds solid mathematical foundations for our children which they can utilise effectively as lifelong learners. We want our children to have a deep and secure understanding of mathematical concepts, understanding the value of learning from mistakes and misconceptions, whilst also being able to reason articulately about their thinking. Furthermore, we want our children to have a positive and wide perception of maths, understanding that it is not simply about recalling answers quickly, but understanding how problems can be solved in a number of different ways.

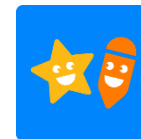
By the time they leave school at the end of year 6, we want our children to:

- Be fluent in the mathematical facts including times tables so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.

In year R, children are introduced to a tens frame to support their recognition of number and their understanding of number bonds to 10.



In order to support the recall of mathematical facts, we use **Doodle Maths** with year 1 and year 2.



In the Spring Term of year 2, children are given a **Times Table Rockstars** account to start them on their journey towards learning their times table facts. They are then able to continually practise their times tables using this platform right through to the end of year 6.



Grayshott Primary School - Autumn Term Overview for the teaching of Mathematics – 2024/25

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8		Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	
Year R	Getting to know you!			Just like me! (Match, sort and compare amounts)					Half Term	It's me 1, 2, 3 (Representing, comparing and composing numbers 1, 2 and 3)		Light and Dark (Representing numbers to 5, finding one more and one less)			Consolidation	
Year 1	Number and Place Value (within 10)					Addition and Subtraction (within 10)		Review and Retrieval	Half Term	Addition and Subtraction (within 10)		Review and Retrieval	Geometry (Shape)	End of Autumn Term Assessment		
	Discreet teaching: Number formation and number bonds to 10.															
Year 2	Number and Place Value	Assessment	Addition and Subtraction					Review and Retrieval	Half Term	Addition and Subtraction		Review and Retrieval	Geometry (Shape)	End of Autumn Term Assessment		
	Discreet teaching: Measurement: Utilise opportunities to tell time, identify days of the week, months of the year, practise calculations involving number facts to 20.															
Year 3	Number and Place Value		Addition Subtraction					Review and Retrieval	Half Term	Addition and Subtraction		Review and Retrieval	Multiplication and Division		End of Autumn Term Assessment	Review and Retrieval
Discreet teaching: 2, 5 and 10x tables and 2D shapes and their properties																
Year 4	Number and Place Value		Addition Subtraction					Review and Retrieval	Half Term	Addition Subtraction	Measurement (area)		Review and Retrieval	Multiplication and Division	End of Autumn Term Assessment	Review and Retrieval
Discreet teaching: 2, 3, 4, 5, 8 and 10x tables and telling the time																
Year 5	Number and Place Value		Addition and Subtraction		Multiplication and Division		Review and Retrieval	Half Term	Multiplication and Division		Fractions			End of Autumn Term Assessment	Review and Retrieval	
Discreet teaching: Roman Numerals/Coordinates/Conversions of units of measurement																
Year 6	Number and Place Value		Addition/Subtraction/Multiplication/ Division including one and two-step problems					Review and Retrieval SATs Assessment	Half Term	Addition/Subtraction/Multiplication/ Division	Fractions		Measurement/Converting units	End of Autumn Term Assessment	Review and Retrieval	
Discreet teaching: Roman Numerals/Angles/Properties of 2D and 3D shapes																

* Review and Retrieval - these are weeks or sequences of lessons where previously taught domains of the maths curriculum are revisited, practised and further consolidated.

Grayshott Primary School - Spring Term Overview for the teaching of Mathematics 2024/25

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year R	Alive in 5! (Composition of 4 and 5)			Growing 6, 7 and 8 (Making pairs)			Half Term	Building 9 and 10 (Comparing numbers to 10 and number bonds to 10)			Consolidation (Revisit numbers 1- 10 including number bonds)		
Year 1	Number and Place Value (within 20)			Addition and Subtraction (within 20)		Review and Retrieval	Half Term	Number and Place Value (within 50)		Length and Height	Review and Retrieval	Assessment Week	Mass and Volume
	Discreet Teaching: Number formation and number bonds to 10.												
Year 2	Money		Multiplication and Division		Review and Retrieval	Half Term	Multiplication and Division		Length and Height		Review and Retrieval	Assessment Week	Mass, Capacity and Temperature
	Discreet Teaching: Identify and describe the properties of 2D and 3D shapes, identify 2D shapes on the surface of 3 D shapes. Counting in twos, fives, tens and threes												
Year 3	Addition and Subtraction Review	Multiplication and Division			Length and Perimeter	Review and Retrieval	Half Term	Fractions		Multiplication and Division	Review and Retrieval	Assessment Week	Mass and Capacity
	Discreet Teaching: 3x and 4x tables, addition and subtraction- 2 digits subtract 2 digits- crossing 10s barrier, properties of 2D shapes												
Year 4	Multiplication and Division			Length and Perimeter		Review and Retrieval	Half Term	Fractions			Consolidate and review	Assessment Week	Decimals
	Discreet Teaching: 7x, 9x, 12x tables, multiplication and division (formal and mental methods)												
Year 5	Multiplication and Division			Fractions		Review and Retrieval	Half Term	Decimals and Percentages		Perimeter and Area	Review and Retrieval	Assessment Week	Statistics
	Discreet Teaching: Shading fractions of a shape, Division (3 digits divide 1 digit), estimating on a number line												
Year 6	Ratio	Calculation (Four operations and problems)	Algebra	Decimals	Review and Retrieval	Half Term	Assessment Week Practice SATs	Fractions, Decimals and Percentages			Review and Retrieval	Area, Perimeter and Volume	Statistics
	Discreet Teaching: Multiplying and dividing 10, 100 and 1000, Simplifying fractions, adding/subtracting and multiplying fractions												

***Consolidation/Review-** these are weeks or sequences of lessons where previously taught domains of the maths curriculum are revisited, practised and further consolidated.

Grayshott Primary School - Summer Term Overview for the teaching of Mathematics- 2024/25

	Week 1	Week 2	Week 3	Week 4	Week 5	Half Term	Week 6	Week 8	Week 9	Week 10	Week 11	Week 12
Year R	To 20 and beyond (Building numbers and counting patterns beyond 10)			First, Then, Now (Adding more, taking away)			Find my pattern (Doubling, sharing and grouping, even and odd)			On the move (deepening understanding of patterns and relationships)		
Year 1	Multiplication and Division			Fractions	Geometry (Position and Direction)		Number and Place Value (within 100)	Measurement (Money)		Measurement (Time)	Assessment Week	Consolidation
Year 2	Fractions			Time			Statistics	Position and direction			Assessment Week	Consolidation
Year 3	Fractions			Money	Time		Time	Shape		Statistics	Assessment Week	Consolidation
Year 4	Decimals			Money	Time		Consolidation	Shape		Statistics	Assessment Week	Position and direction
Year 5	Shape			Position and direction	Decimals		Decimals	Number (Negative Numbers)		Measurement (Converting Units)	Assessment Week	Measurement (Volume)
Year 6	SATs Revision (topics to be decided based on Practice SATs in February 2025)			SATs Week	Shape		Position and direction	Review/consolidation and application of skills across investigations and problems.				

* Review and Retrieval - these are weeks or sequences of lessons where previously taught domains of the maths curriculum are revisited, practised and further consolidated.

Number fact progression

By the end of year 2, children must know the following addition facts and their associated subtraction facts.

<div> <div>Adding 1 and 2</div> <div>Bonds to 10</div> <div>Adding 10</div> <div>Bridging/compensating</div> <div>Doubles</div> <div>Adding 0</div> <div>Near doubles</div> <div>Y1 facts</div> </div>											
+	0	1	2	3	4	5	6	7	8	9	10
0	0 + 0	0 + 1	0 + 2	0 + 3	0 + 4	0 + 5	0 + 6	0 + 7	0 + 8	0 + 9	0 + 10
1	1 + 0	1 + 1	1 + 2	1 + 3	1 + 4	1 + 5	1 + 6	1 + 7	1 + 8	1 + 9	1 + 10
2	2 + 0	2 + 1	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8	2 + 9	2 + 10
3	3 + 0	3 + 1	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7	3 + 8	3 + 9	3 + 10
4	4 + 0	4 + 1	4 + 2	4 + 3	4 + 4	4 + 5	4 + 6	4 + 7	4 + 8	4 + 9	4 + 10
5	5 + 0	5 + 1	5 + 2	5 + 3	5 + 4	5 + 5	5 + 6	5 + 7	5 + 8	5 + 9	5 + 10
6	6 + 0	6 + 1	6 + 2	6 + 3	6 + 4	6 + 5	6 + 6	6 + 7	6 + 8	6 + 9	6 + 10
7	7 + 0	7 + 1	7 + 2	7 + 3	7 + 4	7 + 5	7 + 6	7 + 7	7 + 8	7 + 9	7 + 10
8	8 + 0	8 + 1	8 + 2	8 + 3	8 + 4	8 + 5	8 + 6	8 + 7	8 + 8	8 + 9	8 + 10
9	9 + 0	9 + 1	9 + 2	9 + 3	9 + 4	9 + 5	9 + 6	9 + 7	9 + 8	9 + 9	9 + 10
10	10 + 0	10 + 1	10 + 2	10 + 3	10 + 4	10 + 5	10 + 6	10 + 7	10 + 8	10 + 9	10 + 10

Times table progression

Children are expected to know all their multiplication and division facts by the end of year 4. The below chart outlines the progression of learning those facts from years 2 to 4. Children in year 5 and 6 will continue to practise their times table facts and improve their speed of recall.

x	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3		9	12	15	18	21	24	27	30	33	36
4			16	20	24	28	32	36	40	44	48
5				25	30	35	40	45	50	55	60
6					36	42	48	54	60	66	72
7						49	56	63	70	77	84
8							64	72	80	88	96
9								81	90	99	108
10									100	110	120
11										121	132
12											144

28 multiplication/division facts to learn in year 2 (x2, x5, x10)

+21 multiplication/division facts to learn in year 3 (x3, x4, x8)

+16 multiplication/division facts to learn in year 4 (x6, x7, x9, x11, x12)