St Denys Primary School

Whole School Overview

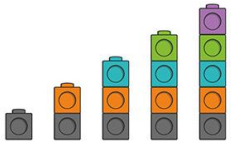
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Reception	Getting to know the class		Subitising 1-3	Counting to 5	Composition 2, 3, 4	Subitise 2-4	Comparison more than fewer than	Count and represent to 5	Comparison Equal, too much, not enough	Composition – wholes and parts	Composition – different parts making the same whole	Counting to 10, numerals to 5	Shape and space Select, rotate and manipulate shapes Repeating patterns	
Year 1	Number **Place value within 10**					Number **Addition and subtraction within 10**					Geometry **2D & 3D Shape**	Measurement **Time (o'clock)**	Assessment and consolidation	
Year 2	Number **Place value**				Number **Addition and subtraction**						Geometry **Shape**		Assessment and consolidation	
Year 3	Number **Place value**			Number **Addition and subtraction**					Number **Multiplication and division**				Assessment and consolidation	
Year 4	Number **Place value**				Number **Addition and subtraction**			Measurement **Area**	Number **Multiplication and division**				Assessment and consolidation	
Year 5	Number **Place value**		Number **Addition and subtraction**			Number **Multiplication and division**			Number **Fractions (add & subtract)**				Assessment and consolidation	
Year 6	Number **Place value**		Number **Four operations**					Number **Fractions (add and subtract)**		Measurement **Converting units**	Number **Fractions (multiply and divide)**		Assessment and consolidation	

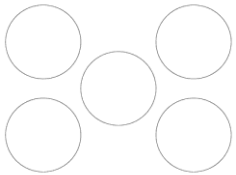
Autumn Term

By the end of the Autumn term, children will:

- Subitise groups and arrangements up to 4 objects
- Count to 10
- Compare 2 sets of objects and say which is 'more than', 'fewer than' or if they are the same
- Know that we have 5 fingers on 1 hand and represent numbers to 5 on their fingers
- Count accurately and follow the rules of counting (say numbers in order, the last number tells us how many, count each object once)
- Understand that when a set is rearranged, the quantity remains the same
- Identify the whole and parts in familiar contexts e.g. body & body parts
- Understand that different parts can make the same whole
- Know some ways to make the numbers 1 – 5
- Begin to recognise numerals to 5
- Have experience of selecting, rotating and manipulating shapes, developing spatial reasoning skills
- Continue, copy and create repeating patterns

Key representations:



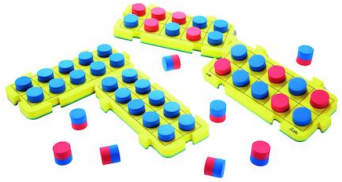


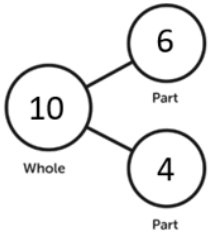
Week	Focus	Focus numbers	Key objectives
3	Subitising (perceptual)	1 - 3	• Perceptually subitise groups of 1, 2 and 3 objects • Represent on fingers • Recognise in larger arrangements • Make and describe spatial patterns
4	Counting, cardinality & ordinality	0 - 5	• Count to 5 • That counting tells us 'how many' • That the last number in the count tells us 'how many altogether' (cardinality) • One to one correspondence (counting each object only once)
5	Composition	2, 3,4	• Know that two is made of 'one and another one' • Know that 3 is made of '1 and 1 and 1' • Know that 4 is made of 4 ones • Use this information to identify collections of 2, 3 or 4 and produce their own collections of 2, 3, or 4.
6	Subitising (perceptual and conceptual)	2, 3, 4	• Subitise arrangements of 2 and 3 • Represent on fingers • Identify when a small collection is rearranged or the quantity changed • Use positional language to describe arrangements of 4
7	Comparison	within 10	• Compare 2 sets of objects and say which is 'more than' or 'fewer than'. • Represent 0 – 4 on fingers in different ways
8	Counting, ordinality and cardinality	5	• One to one correspondence (counting each object only once) • Count to 5 • See that we have 5 fingers on one hand • Make & represent numbers to 5 on fingers • Represent 5 with objects, counters and die frame • 5 and 5 makes 10 altogether
9	Comparison	within 10	• Subitise numbers to 4 • Compare 2 sets of objects and say which is 'more than' or 'fewer than' by looking. • Compare groups of objects by matching them 1:1 • Say when there is an equal number, too much or not enough
10	Composition	1, 2, 3	• Hear the language of 'whole' and 'parts' • Identify the whole and parts in familiar contexts e.g. body & body parts • Recognise that some whole objects have parts that cannot be removed. • Know that 1 and 2 are parts of 3
11	Composition	3, 4, 5	• Investigate ways to compose and de-compose 3, 4 and 5 • Use spatial language to describe shapes • Explain that different parts can make the same whole
12	Counting, ordinality and cardinality	to 10	• Count to 10 • Use fingers to represent quantities (exploring up to 10) • Begin to recognise numerals to 5 • Represent quantities in a range of ways including more abstract representations e.g. clapping, jumping • Understand that when a set is rearranged, the quantity remains the same • That the last number in the count tells us 'how many altogether' (cardinality)
13 & 14	Shape & space	-	• Select, rotate and manipulate shapes, developing spatial reasoning skills • Continue, copy and create repeating patterns • Children copy increasingly complex 2D pictures & patterns with 3D materials e.g. building blocks, magnetic tiles, jigsaws • Make patterns with varying rules (AB, ABB, ABBC) for children to copy, continue and find and fix mistakes.

By the end of the Autumn term, children will:

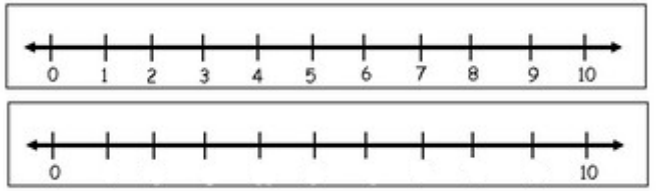
- Fluently count forwards and backwards within 10 from any starting number
- Represent groups of objects with manipulatives, numerals and words (0-10)
- Find and recognise 1 more and 1 less (within 10)
- Compare and order groups and numbers of objects using the language: fewer, more, same
- Compare and order numerical values using the language: less than, greater than, equal to and the symbols < > =
- Use the number line as a representation, including recognising 5 as the mid-point between 0 and 10.
- Use the language of parts and wholes and the 'cherry model' representation.
- Recognise and use the addition (+), equals (=) and subtraction (-) symbols
- Find and represent fact families for addition and subtraction
- Be able to work systematically (finding number bonds)
- Understand addition as adding together and as adding more
- Understand subtraction as finding a part and as taking away.
- Recognise, name and describe 2D shapes: squares, triangles, circles, rectangles; and 3D shapes: cubes, cuboids, cylinders, pyramids, cones, spheres
- Recognise when an analogue clock shows 'o'clock'

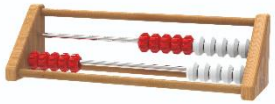
Key representations:

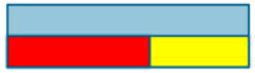


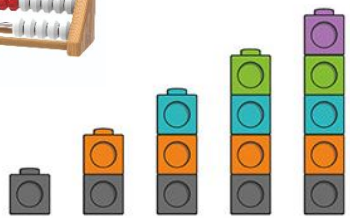


(any orientation)









St Denys Primary School

Year 1 Overview

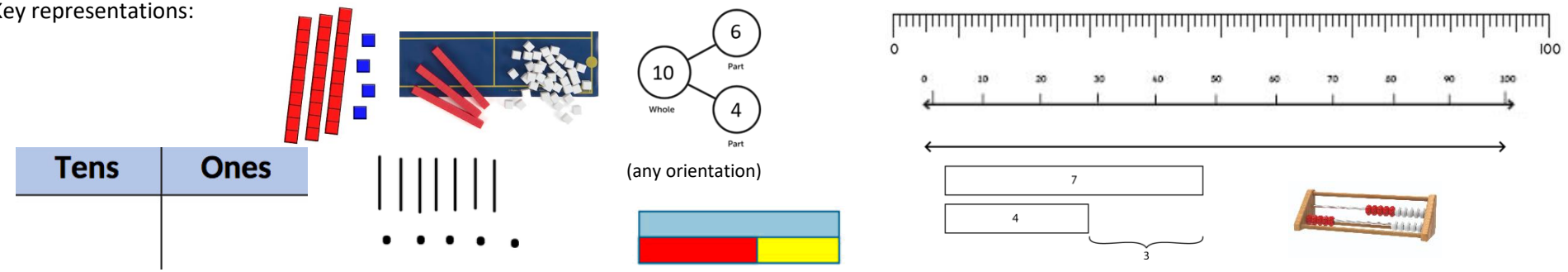
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Unit title	Number **Place value within 10**					Number **Addition and subtraction within 10**					Geometry **2D & 3D Shape**	Measurement **Time (o'clock)**	Assessment and consolidation	
Key learning objectives	• Fluently count forwards and backwards within 10 from any starting number • Represent groups of objects with manipulatives, numerals and words (0-10) • Find and recognise 1 more and 1 less (within 10) • Compare and order groups and numbers of objects using the language: fewer, more, same • Compare and order numerical values using the language: less than, greater than, equal to and the symbols < > = • Use the number line as a representation, including recognising 5 as the mid-point between 0 and 10.					• Use the language of parts and wholes and the 'cherry model' representation. • Recognise and use the addition (+), equals (=) and subtraction (-) symbols • Find and represent fact families for addition and subtraction • Be able to work systematically (finding number bonds) • Understand addition as adding together and as adding more • Understand subtraction as finding a part and as taking away.					• Recognise, name and describe 2D shapes: squares, triangles, circles, rectangles; and 3D shapes: cubes, cuboids, cylinders, pyramids, cones, spheres	• Recognise when an analogue clock shows 'o'clock'	
Additional resources / planning links	NCETM PD materials: 1:1, 1:3, 1:4 Numberblocks Series 1 How to Count Numberblocks Series 3 Blockzilla The Button Box by M. Reid Gingerbread Man Enormous Turnip					NCETM PD materials: 1:2, 1:3, 1:4, 1:5, 1:6, 1:7 Numberblocks Series 1 The Whole of Me Numberblocks Series 2 Blast Off Numberblocks Series 3 Fruit Salad Mr. Gumpy's Outing by J. Burningham						The Bad Tempered Ladybird by E. Carle	WR Autumn Paper 1 & 2.	
Mastering Number focus	• Use of rekenrek • Subitise within 5 • Composition of 5 • '5 and a bit' structure of 6-9					• Compare numbers within 10 using precise language • Order of numbers within 10, connected to 1 more and 1 less • Structure of odd and even numbers (including doubling) • Composition of each of the numbers 6, 8, and 10 • explore number tracks and number lines and identify the differences between them								

Autumn Term

By the end of the Autumn term, children will:

- Count objects to 100 by making tens
- Unitise tens and say how many tens and ones are in a number to 100
- Use a place value chart (tens and ones)
- Partition numbers into tens and ones using standard and flexible partitioning, and express this as an addition equation
- Write numbers to 100 in words
- Locate and place numbers on marked and unmarked 0-100 numberlines, showing an understanding of midpoints
- Compare and order objects and numbers to 100 using the language: (objects) fewer, more, same and (numerical values) less than, greater than, equal to and the symbols < > =
- Recall or have strategies to quickly calculate number bonds to and within 20, representing these in fact families
- Use their knowledge of number bonds within 10 to add and subtract related multiples of 10 (ie 2+3=5 so 20+30 = 50) and find bonds to 100
- Add and subtract ones to/from 2 digit numbers, including across a 10
- Add 3 1-digit numbers
- Add and subtract multiples of ten from 2-digit numbers
- Add and subtract two, 2-digit numbers, including across a 10
- Compare number sentences
- Understand that difference is one of the structures of subtraction
- Solve a range of addition and subtraction problems including missing number problems, determining which operation to use.
- Recognise, name and describe the properties of 2D and 3D shapes including: sides, vertices, faces, edges.
- Sort, identify and draw/make 2D and 3D shapes based on their properties.
- Recognise symmetry and identify vertical lines of symmetry within shapes.

Key representations:



St Denys Primary School

Year 2 Overview

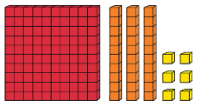
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Unit title	Number **Place value**				Number **Addition and subtraction**						Geometry **Shape**		Assessment and consolidation	
Key learning objectives	• Count objects to 100 by making tens • Unitise tens and say how many tens and ones are in a number to 100 • Use a place value chart (tens and ones) • Partition numbers into tens and ones using standard and flexible partitioning, and express this as an addition equation • Write numbers to 100 in words • Locate and place numbers on marked and unmarked 0-100 numberlines, showing an understanding of midpoints • Compare and order objects and numbers to 100 using the language: (objects) fewer, more, same and (numerical values) less than, greater than, equal to and the symbols < > =				• Recall or have strategies to quickly calculate number bonds to and within 20, representing these in fact families • Use their knowledge of number bonds within 10 to add and subtract related multiples of 10 (ie 2+3=5 so 20+30 = 50) and find bonds to 100 • Add and subtract ones to/from 2 digit numbers, including across a 10 • Add 3 1-digit numbers • Add and subtract multiples of ten from 2-digit numbers • Add and subtract two, 2-digit numbers, including across a 10 • Compare number sentences • Solve a range of addition and subtraction problems including missing number problems, determining which operation to use. • Understand that difference is one of the structures of subtraction (NCETM 1.12)				• Recognise, name and describe the properties of 2D and 3D shapes including: sides, vertices, faces, edges. • Sort, identify and draw/make 2D and 3D shapes based on their properties. • Recognise symmetry and identify vertical lines of symmetry within shapes			
Additional resources / planning links	NCETM: 1.8, 1.9				NCETM: 1.11, 1.12, 1.13, 1.14, 1.15, 1.16								WR Autumn Paper 1 & 2	
Mastering Number focus	• Review the composition of the numbers 6 to 9 as '5 and a bit' • Compare numbers using the language of comparison and use the symbols < > =				• review the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6, 8 and 10 • review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9 • consolidate their understanding of the numbers 10 and 20 as '10 and a bit' • consolidate their understanding of the linear number system to 20 and reason about midpoints									

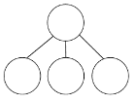
Autumn Term

By the end of the Autumn term, children will:

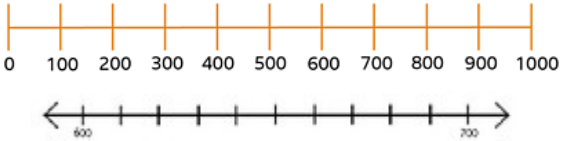
- Know that there are 10 tens in 100 and use this knowledge to explore other multiples of 100 within 1000.
- Count in 100s to 1000
- Represent numbers to 1000
- Identify the value of any given digit in a 3-digit number
- Partition numbers to 1000 in standard and flexible ways
- Use place value counters as a representation
- Find 1, 10 or 100 more or less than a given number
- Locate, estimate and place numbers on marked and unmarked 0-1000 numberlines (and sections of numberlines), showing an understanding of midpoints
- Compare and order numbers to 1000
- Count in 50s to 1000
- Recall their knowledge of number bonds to and within 10 and apply this to 10s and 100s
- Mentally add and subtract 1s, 10s and 100s from 3 digit numbers, including across 10s and 100s.
- Notice and explore patterns and connections between number facts when adding and subtracting
- Add two, 2 and 3 digit numbers using the formal written method (column addition), including with 1 or more exchange
- Subtract two, 2 and 3 digit numbers using the formal written method (column subtraction), including with 1 or more exchange
- Recall or efficiently calculate complements to 100
- Check answers using estimation and inverse operations
- Make decisions about which operation and which method to use to solve a problem, including multi-step problems.
- Build and use arrays to represent multiplication, including understanding the link between multiplication and repeated addition
- Identify multiples of 2, 5 and 10 and explain why a number is or isn't a multiple of 2, 5 or 10.
- Understand division as both sharing and grouping (quotitive & partitive)
- Multiply and divide by 3, 4 and 8, showing fluency with the 3, 4 and 8 times-tables
- Make and explain links between multiplying and dividing by 2, 4 and 8 (doubling and halving)

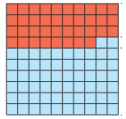
Key representations:

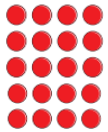


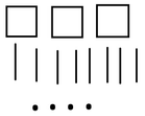


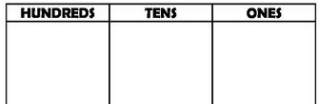
(any orientation and number of parts)

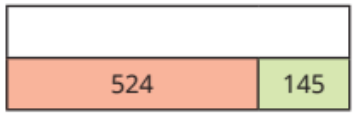


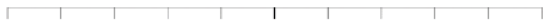


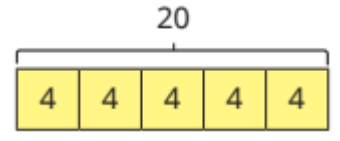












St Denys Primary School

Year 3 Overview

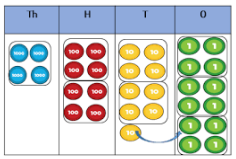
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Unit title	Number **Place value**			Number **Addition and subtraction**					Number **Multiplication and division**				Assessment and consolidation	
Key learning objectives	• Know that there are 10 tens in 100 and use this knowledge to explore other multiples of 100 within 1000. • Count in 100s to 1000 • Represent numbers to 1000 • Identify the value of any given digit in a 3-digit number • Partition numbers to 1000 in standard and flexible ways • Use place value counters as a representation • Find 1, 10 or 100 more or less than a given number • Locate, estimate and place numbers on marked and unmarked 0-1000 numberlines (and sections of numberlines), showing an understanding of midpoints • Compare and order numbers to 1000 • Count in 50s to 1000			• Recall their knowledge of number bonds to and within 10 and apply this to 10s and 100s • Mentally add and subtract 1s, 10s and 100s from 3 digit numbers, including across 10s and 100s. • Notice and explore patterns and connections between number facts when adding and subtracting • Add two, 2 and 3 digit numbers using the formal written method (column addition), including with 1 or more exchange • Subtract two, 2 and 3 digit numbers using the formal written method (column subtraction), including with 1 or more exchange • Recall or efficiently calculate complements to 100 • Check answers using estimation and inverse operations • Make decisions about which operation and which method to use to solve a problem, including multi-step problems.					• Build and use arrays to represent multiplication, including understanding the link between multiplication and repeated addition • Identify multiples of 2, 5 and 10 and explain why a number is or isn't a multiple of 2, 5 or 10. • Understand division as both sharing and grouping (quotitive & partitive) • Multiply and divide by 3, 4 and 8, showing fluency with the 3, 4 and 8 times-tables • Make and explain links between multiplying and dividing by 2, 4 and 8 (doubling and halving)				
Additional resources / planning links	NCETM 1.8, 1.17, 1.18,			NCETM 1.17, 1.19, 1.20, 1.21					NCETM 2.2, 2.3, 2.4, 2.5, 2.6, 2.7				WR Autumn Paper 1 & 2	
TTRS focus	10x, 5x, 2x			10x, 5x, 2x, 4x					4x, 8x, 3x					

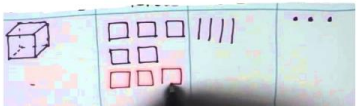
Autumn Term

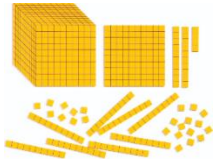
By the end of the Autumn term children will:

- Know that there are 10 hundreds in 1000 and use this knowledge to explore other multiples of 1000
- Count forwards and backwards in 1000s
- Represent numbers to 10,000
- Partition numbers to 10,000 in standard and flexible ways
- Find 1, 10, 100 or 1000 more or less than a given number
- Locate, estimate and place numbers on marked and unmarked 0-10000 numberlines (and sections of numberlines), showing an understanding of midpoints
- Compare and order numbers to 10,000
- Represent and read numbers in Roman numerals to 100
- Round to the nearest 10, 100 or 1000
- Mentally add and subtract 1s, 10s, 100s and 1000s from 4 digit numbers, including across 10s, 100s and 1000s
- Notice and explore patterns and connections between number facts when adding and subtracting
- Add two, 2, 3 and 4 digit numbers using the formal written method (column addition), including with 1 or more exchange
- Subtract two, 2, 3 and 4 digit numbers using the formal written method (column subtraction), including with 1 or more exchange
- Make decisions about which operation and which method to use to solve a problem, including identifying when mental strategies may be more efficient
- Estimate by rounding and use this to check answers, alongside inverse operations
- Know that area is the space taken up by a two-dimensional shape and find area by counting squares
- Multiply and divide by 3, 6 and 9, showing fluency with the 3, 6 and 9 times-tables and making and using links between them to calculate efficiently
- Multiply and divide by 7, showing fluency with the 7 times table
- Understand and explain what happens when multiplying by 1 or 0
- Understand and explain what happens when dividing a number by 1 or itself
- Apply their knowledge of multiplication and times tables to multiply 3 numbers together

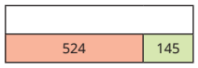
Key representations:

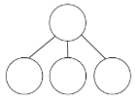




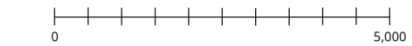


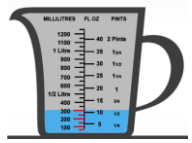
1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9





(any orientation and number of parts)





St Denys Primary School

Year 4 Overview

	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
Unit title	Number **Place value**				Number **Addition and subtraction**			Measurement **Area**	Number **Multiplication and division**				Assessment and consolidation	
Key learning objectives	• Know that there are 10 hundreds in 1000 and use this knowledge to explore other multiples of 1000 • Count forwards and backwards in 1000s • Represent numbers to 10,000 • Partition numbers to 10,000 in standard and flexible ways • Find 1, 10, 100 or 1000 more or less than a given number • Locate, estimate and place numbers on marked and unmarked 0-10000 numberlines (and sections of numberlines), showing an understanding of midpoints • Compare and order numbers to 10,000 • Represent and read numbers in Roman numerals to 100 • Round to the nearest 10, 100 or 1000				• Mentally add and subtract 1s, 10s, 100s and 1000s from 4 digit numbers, including across 10s, 100s and 1000s • Notice and explore patterns and connections between number facts when adding and subtracting • Add two, 2, 3 and 4 digit numbers using the formal written method (column addition), including with 1 or more exchange • Subtract two, 2, 3 and 4 digit numbers using the formal written method (column subtraction), including with 1 or more exchange • Make decisions about which operation and which method to use to solve a problem, including identifying when mental strategies may be more efficient • Estimate by rounding and use this to check answers, alongside inverse operations			Know that area is the space taken up by a two-dimensional shape and find area by counting squares	• Multiply and divide by 3, 6 and 9, showing fluency with the 3, 6 and 9 times-tables and making and using links between them to calculate efficiently • Multiply and divide by 7, showing fluency with the 7 times table • Understand and explain what happens when multiplying by 1 or 0 • Understand and explain what happens when dividing a number by 1 or itself • Apply their knowledge of multiplication and times tables to multiply 3 numbers together			
Additional resources / planning links	NCETM 1.22				NCETM 1.19, 1.20, 1.21, 1.22			NCETM 2:16 (without expecting children to calculate)	NCETM 2.8, 2.9, 2.10, 2.4, 2.20				WR Autumn Paper 1 & 2	
TTRS focus	2x, 4x, 8x, 3x				2x, 4x, 8x, 3x			6x	3x, 6x, 9x, 7x					

Autumn Term

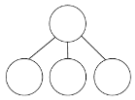
St Denys Primary School

Year 5 Overview

By the end of the Autumn term, children will:

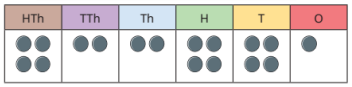
- Represent and read numbers in Roman numerals to 1000
- Read, write and represent numbers to 1,000,000 in numbers and words
- Make links and describe the relationship between numbers in different columns as powers of 10
- Find 1, 10, 100 or 1000, 10,00 and 100,000 more or less than a given number
- Partition numbers to 1,000,000 in standard and flexible ways
- Locate, estimate and place numbers on marked and unmarked 0-1,000,000 numberlines (and sections of numberlines), showing an understanding of midpoints
- Compare and order numbers to 1,000,000
- Round any number up to 1,000,000 to any power of 10 up to 100,000
- Use a range of strategies including: knowledge of number bonds, unitising, multiples, compensation and adjustment to mentally calculate answers
- Use the formal written method (column addition/subtraction) to add and subtract whole numbers up to 1,000,000
- Estimate by rounding and use this to check answers, alongside inverse operations
- Solve addition and subtraction problems with more than one step, including representing them (usually with bar models)
- Notice connections and compare calculations
- Multiply and divide by multiples of 10, 100 and 1000
- Find missing numbers in calculations using the inverse relationship and by comparing calculations
- Find multiples and common multiples
- Use the language: ‘factor’, ‘multiple’, ‘common multiple’, ‘product’ accurately
- Find factors and common factors
- Understand what is meant by ‘prime numbers’ and ‘composite numbers’ and be able to determine whether numbers to 100 are prime.
- Understand what is meant by square numbers, use the notation ^{2} and recognise square numbers to 12x12
- Understand what is meant by cube numbers, use the notation ^{3} and describe how to calculate them.
- Multiply and divide by 10, 100 and 1000
- Multiply and divide by multiples of 10, 100 and 1000
- Find and recognise equivalent fractions
- Convert between improper fractions and mixed numbers
- Compare and order sets of fractions less than and greater than 1
- Add and subtract fractions and mixed numbers, including finding a common denominator where necessary

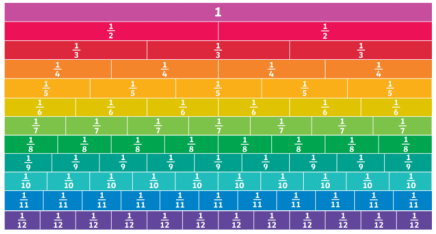
Key representations:

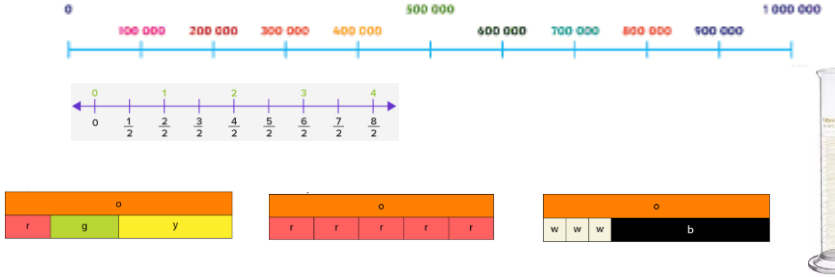


(any orientation and number of parts)

100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000
10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9







St Denys Primary School

Year 5 Overview

	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
Unit title	Number **Place value**			Number **Addition and subtraction**		Number **Multiplication and division**			Number **Fractions**				Assessment and consolidation	
Key learning objectives	• Represent and read numbers in Roman numerals to 1000 • Read, write and represent numbers to 1,000,000 in numbers and words • Make links and describe the relationship between numbers in different columns as powers of 10 • Find 1, 10, 100 or 1000, 10,00 and 100,000 more or less than a given number • Partition numbers to 1,000,000 in standard and flexible ways • Locate, estimate and place numbers on marked and unmarked 0-1,000,000 numberlines (and sections of numberlines), showing an understanding of midpoints • Compare and order numbers to 1,000,000 • Round any number up to 1,000,000 to any power of 10 up to 100,000			• Use a range of strategies including: knowledge of number bonds, unitising, multiples, compensation and adjustment to mentally calculate answers • Use the formal written method (column addition/subtraction) to add and subtract whole numbers up to 1,000,000 • Estimate by rounding and use this to check answers, alongside inverse operations • Solve addition and subtraction problems with more than one step, including representing them (usually with bar models) • Notice connections and compare calculations • Find missing numbers in calculations using the inverse relationship and by comparing calculations		• Find multiples and common multiples • Use the language: 'factor', 'multiple', 'common multiple', 'product' accurately • Find factors and common factors • Understand what is meant by 'prime numbers' and 'composite numbers' and be able to determine whether numbers to 100 are prime. • Understand what is meant by square numbers and recognise square numbers to 12x12 • Understand what is meant by cube numbers and describe how to calculate them. • Multiply and divide by 10, 100 and 1000 • Multiply and divide by multiples of 10, 100 and 1000			• Find and recognise equivalent fractions • Convert between improper fractions and mixed numbers • Compare and order sets of fractions less than and greater than 1 • Add and subtract fractions and mixed numbers, including finding a common denominator where necessary			
Additional resources / planning links	NCETM 1.26 (1.17, 1.18, 1.22)			NCETM 1.26, 1.29, 1.28		NCETM 2.13, 2.21,			NCETM 3.4, 3.5, 3.7, 3.8				WR Autumn Paper 1 & 2	
TTRS focus	All 2x-12x to identify focus tables			Focus x tables Mixed all tables for speed recall										

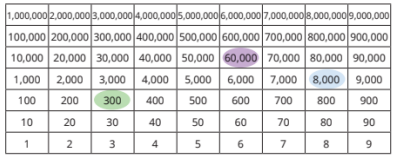
St Denys Primary School

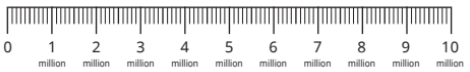
Year 6 Overview

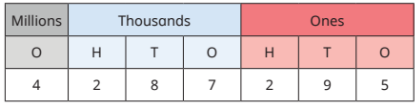
By the end of the Autumn term, children will:

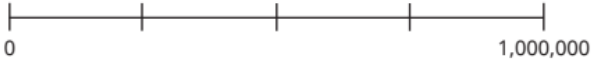
- Read, write and represent numbers to 10,000,000, partitioning them in standard and non-standard ways
- Identify numbers that are powers of 10 and multiples of powers of 10, describing how moving a digit in the columns of a place value chart changes the value of the digit
- Locate, estimate and place numbers on marked and unmarked 0-10,000,000 numberlines (and sections of numberlines), showing an understanding of midpoints
- Compare and order any integer
- Round any integer
- Use negative numbers in real-life contexts, including finding the difference between numbers, including across 0.
- Add and subtract integers, including in multi-step problems, choosing the most appropriate strategy each time (mental or written)
- Apply their knowledge of common factors and common multiples to solve problems
- Recall rules of divisibility for 2, 5, 10, 4, 8, 3, 9, 11 and know how to combine these rules to explore other potential factors e.g. 6.
- Multiply integers, including in multi-step problems, choosing the most appropriate strategy each time (mental or written)
- Divide by single digit numbers using short division, including interpreting any remainders in context
- Find factors then use repeated division to divide by a 2-digit number
- Use the algorithm for long division, including where there is a remainder
- Solve multi-step problems in real life contexts involving more than one calculation, including representing the problem using a model
- Know and apply the order of priority for operations in a calculation
- Reason from known facts and identify and use related calculations, including the inverse
- Use their knowledge of equivalent fractions to recognise when fractions are/are not in their simplest form
- Compare and order fractions including placing them on a number line
- Add and subtract any two fractions and/or mixed numbers
- Apply their knowledge of fractions to solve multi-step problems
- Recognise, read, write and convert between all metric measures for length, mass and capacity
- Use and apply their conversion skills to solve measurement problems in context
- Convert between metric and imperial measurements including: miles / kilometres, inches / cm, stone / pounds, feet / inches, gallons / pints, pounds / ounces
- Multiply fractions and mixed numbers by integers and fractions
- Divide fractions by integers
- Solve single and multi-step fractions problems, applying their knowledge of using the four operations with fractions
- Find fractions of amounts and the whole amount given a fraction of it

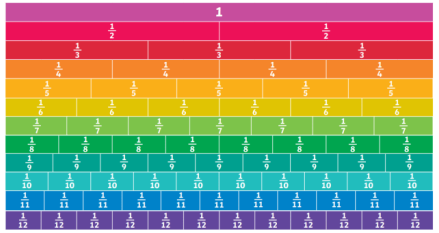
Key representations:

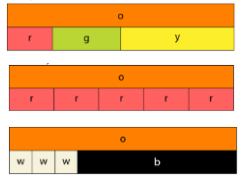


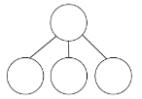












(any orientation and number of parts)

Autumn Term

St Denys Primary School

Year 6 Overview

	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
Unit title	Number **Place value**		Number **4 operations**					Number **Fractions**		Measurement **Converting units**	Number **Fractions**		Assessment and consolidation	
Key learning objectives	• Read, write and represent numbers to 10,000,000, partitioning them in standard and non-standard ways • Identify numbers that are powers of 10 and multiples of powers of 10, describing how moving a digit in the columns of a place value chart changes the value of the digit • Locate, estimate and place numbers on marked and unmarked 0-10,000,000 numberlines (and sections of numberlines), showing an understanding of midpoints • Compare and order any integer • Round any integer • Use negative numbers in real-life contexts, including finding the difference between numbers, including across 0.		• Add and subtract integers, including in multi-step problems, choosing the most appropriate strategy each time (mental or written) • Apply their knowledge of common factors and common multiples to solve problems • Recall rules of divisibility for 2, 5, 10, 4, 8, 3, 9, 11 and know how to combine these rules to explore other potential factors e.g. 6. • Multiply integers, including in multi-step problems, choosing the most appropriate strategy each time (mental or written) • Divide by single digit numbers using short division, including interpreting any remainders in context • Find factors then use repeated division to divide by a 2-digit number • Use the algorithm for long division, including where there is a remainder • Solve multi-step problems in real life contexts involving more than one calculation, including representing the problem using a model • Know and apply the order of priority for operations in a calculation • Reason from known facts and identify and use related calculations, including the inverse					- Use their knowledge of equivalent fractions to recognise when fractions are/are not in their simplest form - Compare and order fractions including placing them on a number line - Add and subtract any two fractions and/or mixed numbers - Apply their knowledge of fractions to solve multi-step problems	- Recognise, read, write and convert between all metric measures for length, mass and capacity - Use and apply their conversion skills to solve measurement problems in context - Convert between metric and imperial measurements including: miles / kilometres, inches / cm, stone / pounds, feet / inches, gallons / pints, pounds / ounces	• Multiply fractions and mixed numbers by integers and fractions • Divide fractions by integers • Solve single and multi-step fractions problems, applying their knowledge of using the four operations with fractions • Find fractions of amounts and the whole amount given a fraction of it		
Additional resources / planning links	NCETM 1.30, 1.27		NCETM 1.30, 2.23, 2.24, 2.28, 2.22, 2.12, 2.14, 2.15					NCETM 3.5, 3.7, 3.8		NCETM measures examples through all PV units	NCETM 3.6, 3.9 (3.2, 3.3)		WR Autumn Paper 1 & 2	
TTRS focus	Mixed all tables for speed recall		Using x tables in routine & non-routine problems								Using x tables in routine & non-routine problems esp. conversion of measures			

Autumn Term