



Maths

Unit Overviews

EYFS

Autumn	Spring	Summer
Number: • Counting to 10 • Identifying numbers to 10 • Representing numbers • One more/less Numerical Patterns: • Recognise numbers and patterns, including shapes. • Symmetry	Number: • Numbers to 20 • One more/less • Simple addition and subtraction Numerical Patterns: • 3D shapes	Number: • Numbers to 100 • Ten more/less • Simple addition and subtraction Numerical Patterns: • 3D shapes • Doubling and halving patterns

Key Stage 1

(Years 1 and 2)

Big Question Link: Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Place Value

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Place value in two-digit numbers	Year 1: - count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number - count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s - given a number, identify 1 more and 1 less - identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least - read and write numbers from 1 to 20 in numerals and words Year 2 - count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward - recognise the place value of each digit in a two-digit number (10s, 1s) - identify, represent and estimate numbers using different representations, including the number line - compare and order numbers from 0 up to 100; use <, > and = signs - read and write numbers to at least 100 in numerals and in words - use place value and number facts to solve problems	Unit 1	Counting and Estimating	Work in books
Key Vocabulary		Unit 2	Teens and place value in 2-digit numbers	
Partition Compare Order Number words to 100 Ordinal number words Ordinal More Less		Unit 3	Numbers on a line; compare/order	
		Unit 4	Count to 100, 1 more 1 less, ordinals	
Big Question Link		Vision and Values Link		
Year A: Which toys and games use numbers? Year B: Have numbers changed over time?		To be able to use maths to make wise choices		

Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Addition and Subtraction A

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics	Year 1: - Know number bonds to 10. Also know what is left if objects are taken from 10. - Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. - Solve missing number problems and +/- problems in number stories. - Add small numbers by counting on. Year 2 - Know securely number pairs for all the numbers up to and including 20. - Add a 2-digit number and 10s. - Count back in 1s or 10s or use number facts to take away. - Recognise that +/- are inverse operations; use addition to check subtractions and solve missing number problems. - Solve problems involving addition and subtraction of numbers, using recall of number facts and appropriate models and images.	Unit 1	Partition numbers; learn number bonds	Work in books
Key Vocabulary		Unit 2	Add by counting on in 1s or 10s	
Number bond Addition Subtraction Counting on Two-digit Tens Ones Inverse		Unit 3	Counting back; understand + and –	
Big Question Link		Vision and Values Link		
Year A: Which toys and games use numbers? Year B: Have numbers changed over time?		To be able to use maths to make wise choices		

Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Measures

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Counting, order and comparing numbers	Year 1: - Compare objects according to height & length, using appropriate mathematical language. - Count uniform non-standard, then simple standard units to measure length/height. Year 2 - Choose/use appropriate standard units to estimate & measure length & height, to the nearest appropriate unit using rulers & instruments. - Compare and order objects according to length, using suitable units, and record the results using >, < and = .	Unit 1	Comparing and measuring lengths	Work in books
Key Vocabulary				
Measure Length Metre Decimetre Centimetre Ruler Compare <, >, =				
Big Question Link		Vision and Values Link		
Year A: Are all the snakes the same length in snakes and ladders? How could we check? Year B: When did we start to use metric measures?		To be able to use maths to make wise choices		

Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Addition and Subtraction B

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Place value in two-digit numbers	Year 1: - Know number bonds to 10, e.g. 5 + 5, 6 + 4, etc. Also know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. - Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. - Solve missing number problems and addition/subtraction problems in number stories. - Count on and back in ones to and from 100 and from any single-digit or 2-digit number; given a number up to 100, identify one more - Add small numbers by counting on and subtract small numbers by counting back. Year 2 - Know different unit patterns when + or -, first when not crossing a ten & then when crossing a ten, in numbers up to 100. - Count back in 1s or use number facts to take away, e.g. 27-3, 52 – 4. - Begin to count up to find a difference between 2 numbers with a small gap. - Solve problems involving addition and subtraction of numbers, using recall of number facts and appropriate models and images. - Add a two-digit number and tens. Add two 2-digit numbers that total <100 by counting on in 10s and 1s.	Unit 1	Reinforce and consolidate number bonds	Work in books
Key Vocabulary		Unit 2	Use number facts to add and subtract	
Number bonds Addition Subtraction Compare Order +, -, = Count on Count back Difference		Unit 3	Adding and subtracting tens and ones	
Big Question Link		Vision and Values Link		
Year A: Which toys and games use numbers? Year B: Have numbers changed over time?		To be able to use maths to make wise choices		

Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Time

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Compare and order numbers	Year 1: - Tell the time to the half hour on analogue and digital clocks. Number bonds to 10, e.g. 5 + 5, 6 + 4, etc. Also know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. - Use the language of time: minutes and hours. - Sequence events in chronological order. Year 2 - Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. - Know number of seconds in a minute, minutes in an hour; use it to compare/sequence intervals of time.	Unit 1	Tell time to half and quarter hours	Work in books
Key Vocabulary				
Time Half past Quarter past Quarter to Digital Analogue Compare Sequence Interval		Unit 2	Understand units of time	
Big Question Link		Vision and Values Link		
Year A: Play What’s The Time Mr Wolf? Year B: How have clocks changed over time?		To be able to use maths to make wise choices		

Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Addition and Subtraction C

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Compare and order numbers Number bonds Prior addition and subtraction units	Year 1: - Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. - Add small numbers by counting on. - Solve addition and subtraction problems. - Recognise & know the value of different denominations of coins and notes. Year 2 - Add two or three single-digit numbers, using number facts and counting up. - Add a 2-digit number and 10s; add two 2-digit numbers that total <100 by counting on in 10s and 1s. - Solve problems involving +/- of numbers, quantities & measures, using recall of number facts & appropriate models & images. - Combine amounts, find different combinations of coins that give same amount. - Solve simple problems in a practical context; add and subtract pence, including finding and giving change.	Unit 1	Using different strategies for addition	Work in books
Key Vocabulary				
Addition Subtraction +, - = Counting on Problem Pounds, £ Pence, p Combine Change		Unit 2	Coin recognition: find amounts & change	
Big Question Link		Vision and Values Link		
Year A: Which toys and games use money? Year B: How has money changed over time?		To be able to use maths to make wise choices		

Big Question Link: Year A: Do You Remember? Year B: How has life changed?

Unit grid: Maths- Fractions and Multiplication

Autumn /Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Compare and order numbers Number bonds Prior addition and subtraction units	Year 1: • Add two or three single-digit numbers, using number facts and counting up. • Add a 2-digit number and 10s; add two 2-digit numbers that total <100 by counting on in 10s and 1s. • Solve problems involving +/- of numbers, quantities & measures, using recall of number facts & appropriate models & images. • Combine amounts, find different combinations of coins that give same amount. • Solve simple problems in a practical context; add and subtract pence, including finding and giving change. Year 2 • Begin to know 10× and 5× tables; use × sign correctly. • Double and halve numbers up to 20. • Write multiplications, using × and = signs; calculate answers. • Solve multiplication/ division problems in context, doubling, halving. • Begin to recognise the equivalence of 2/4 & 1/2 on the number line & in other practical contexts. • Understand 1/2, 1/4, 1/3, 3/4, 2/3 as fractions of quantities in a practical context; solve problems using shapes, objects, and quantities.	Unit 1	Understanding halves and quarters	Work in books
Key Vocabulary		Unit 2	Doubling & halving; odd & even numbers	
Half Quarter Steps Double Odd Even Multiple		Unit 3	Counting in steps of 5 and 10	
Big Question Link		Vision and Values Link		
Year A: Which toys and games use money? Year B: How has money changed over time?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Place Value

Autumn/**Spring** / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Autumn Term Place Value Prior Addition and Subtraction	Year 1: - Count on and back in ones to and from 100 and from any 1-digit or 2-digit number. Given a number up to 100, identify one more and one less. - Count on and back in tens from any 1-digit or 2-digit number, e.g. 23, 33, 43, 53. Continue to just over 100. - Locate any number on a 1–100 grid or a 0–100 beaded line. - Compare numbers to at least 20. - Read and write numbers to 100 in numerals and read numbers in words to 20.	Unit 1	2-Digit Place Value	Work in books
Key Vocabulary				
Place value Number line More Less Compare Round	Year 2 - Identify any number on the 1–100 grid, understanding that each number is a multiple of ten and some ones. - Locate any 2-digit number on a 1–100 grid or a landmarked line; use this to order and compare numbers with <, > and = signs. - Count on and back in 10s from any number. - Read and write numbers to at least 100 in numerals and make recognisable attempts to write numbers in words. - Add a 2-digit number and tens; add two 2-digit numbers that total <100 by counting on in 10s & 1s. - Count back in ones or tens or use number facts to take away, e.g. $27 - 3 = \square$ or $54 - 20 = \square$.	Unit 2	Numbers and Quantities	
Big Question Link		Vision and Values Link		
Year A: How are numbers used in distance? Year B: How can we raise money for charity?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Addition and Subtraction A

Autumn/Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Autumn Term Place Value Prior Addition and Subtraction	Year 1: - Know number bonds to 10. - Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. - Begin to know pairs which make 5, 6, 7, 8, 9. - Solve missing number problems and addition/ subtraction problems in number stories. - Recognise and know the value of different denominations of coins and notes. - Add small numbers by counting on; subtract small numbers by counting back. Year 2 - Use place value and number facts to solve problems, e.g. $60 - 40 = 20$. - Know securely number pairs for all the numbers up to and including 20, e.g. pairs which make 15 or 17. - Recognise that addition and subtraction are inverse operations; use addition to check subtractions and solve missing number. - Add 2 or 3 single-digit numbers, using number facts and counting up. - Show that addition of 2 numbers can be done in any order (commutative) and subtraction cannot. - Recognise/use symbols for pounds (£) and pence (p); combine amounts, find different combinations of coins that give the same amount. - Solve simple problems in a practical context; add and subtract pence and pounds, including finding and giving change.	Unit 1	Mental Addition and Subtraction	Work in books
Key Vocabulary				
Add Subtract Mentally Doubles Change		Unit 2	Adding and Subtracting Money	
Big Question Link		Vision and Values Link		
Year A: How are numbers used in distance? Year B: How can we raise money for charity?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Money and Time

Autumn/**Spring** / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Use place value and number facts to solve problems, e.g. $60 - \square = 20$. - Add a 2-digit number and 10s; add two 2-digit numbers that total less than 100 by counting on in 10s and 1s. - Count back in 1s or 10s or use number facts to take away, e.g. $27-3 =$ or $54-20 =$. - Tell/write the time on digital/analogue clocks to half past, quarter past and quarter to the hour; draw hands on a clock face to show these times. - Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. - Know number of minutes in an hour and hours in a day; use it to compare/sequence intervals of time. Year 2 - Use place value and number facts to solve problems, e.g. $60 - \square = 20$. - Add a 2-digit number and 10s; add two 2-digit numbers that total less than 100 by counting on in 10s and 1s. - Count back in 1s or 10s or use number facts to take away, e.g. $27-3 =$ or $54-20 =$. - Tell/write the time on digital/analogue clocks to half past, quarter past and quarter to the hour; draw hands on a clock face to show these times. - Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. - Know number of minutes in an hour and hours in a day; use it to compare/sequence intervals of time.	Unit 1	Add and Subtract Pairs of 2-Digit Numbers	Work in books
Key Vocabulary		Unit 2	Tell the Time; Units of Time	
Pence, p Total Add Subtract 2-Digit Analogue Digital Quarter to/past Half Past O’Clock Week Fortnight Year Day				
Big Question Link		Vision and Values Link		
Year A: How long does it take to get to different places? Year B: How can we raise money for charity?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Measure and Data

Autumn/**Spring** / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Compare objects according to weight using appropriate mathematical language. - Count uniform non-standard to measure weight. Year 2 - Choose/use appropriate standard units to estimate and measure weight to the nearest appropriate unit using scales and instruments. - Compare and order objects according to weight, using suitable units, and record the results using >, < and =.	Unit 1	Compare and Measure Weight	Work in books
Key Vocabulary				
Weight Heavy, heavier, heaviest Light, lighter, lightest Scales Balance Full Empty Half full Capacity Grams Litre		Unit 2	Measure and Represent Capacity	
Big Question Link		Vision and Values Link		
Year A: Where should we go to find water? Year B: How are weight and capacity used by people who help us?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Addition and Subtraction B

Autumn/Spring / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Know number bonds to 10, e.g. 5 + 5, 6 + 4, etc. Also know what is left if objects are taken from 10. - Begin to know pairs which make 5, 6, 7, 8, 9 and 20. - Begin to be aware of unit patterns. - Add small numbers by counting on.	Unit 1	Addition	Work in books
Key Vocabulary	Year 2 - Use place value and number facts to solve problems. - Add a 2-digit number and tens; add two 2-digit numbers which total less than 100. - Count back in ones or tens or use number facts to take away, e.g. 27 – 3 = or 54 – 20 =. - Begin to count up to find a difference between two numbers with a small gap, e.g. 42 – 38.			
Number bonds Add Subtract Count on Frog Difference Partition		Unit 2	Subtraction	
Big Question Link		Vision and Values Link		
Year A: Calculate total distances using addition and subtraction Year B: How can I use maths to help me?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Multiplication

Autumn/**Spring** / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Use place value and number facts to solve problems. - Add a 2-digit number and tens; add two 2-digit numbers which total less than 100. - Count back in ones or tens or use number facts to take away, e.g. $27 - 3 =$ or $54 - 20 =$. - Begin to count up to find a difference between two numbers with a small gap, e.g. $42 - 38$. Year 2 - Count from 0 in steps of 2, 3, 5 and 10. - Count on and back in 10s from any number. - Know 2 times, 5 times and 10 times tables, and related division facts, e.g. saying how many 10s in 40; use multiplication and division signs correctly. - Write multiplications and divisions, using multiplication, division and equal signs - Understand that multiplication can be done in any order (commutative) and division - Solve multiplication/ division problems in context, using recall of multiplication/ division facts, doubling, halving, arrays, 'clever counting'	Unit 1	Clever counting, multiplication	Work in books
Key Vocabulary				
Odd Double Half Array Multiple Family Multiply Divide Number sentence		Unit 2	Relating multiplication and division	
Big Question Link		Vision and Values Link		
Year A: How are numbers used in distances? Year B: How can I use maths to help me?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Fractions

Autumn/**Spring** / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Recognise doubles to double 6 and find related halves (half even numbers up to 12). - Recognise, find and name a half as 1 of 2 equal parts of an object, shape, quantity. - Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. Year 2 - Count in halves and quarters, recognising fractions as numbers. - Begin to recognise the equivalence of 2/4 and ½ on the number line and in other practical contexts. - Understand ½, ¼, 1/3, ¾, 2/3 as fractions of quantities in a practical context; solve problems using shapes, objects, quantities.	Unit 1	Fractions	Work in books
Key Vocabulary				
Odd Double Half Array Multiple Family Multiply Divide Number sentence				
Big Question Link		Vision and Values Link		
Year A: How are numbers used in distances? Year B: How can I use maths to help me?		To be able to use maths to make wise choices		

Big Question Link: Year A: Where Shall We Go? Year B: Who Can Help me?

Unit grid: Maths- Shape
Autumn/**Spring** / Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Name and describe common 2-D shapes; recognise the difference between 2-D and 3-D shapes. - Sort items into lists or tables. - Name and describe common 3-D shapes; recognise the difference between 2-D and 3-D shapes. Year 2 - Identify/ describe common 2-D shapes, referring to properties; compare/sort 2-D shapes. - Recognise line symmetry and create symmetrical patterns. - Identify/describe common 3-D shapes, referring to number of edges, vertices, faces (curved and flat); compare/sort 3-D shapes	Unit 1	2D Shapes	Work in books
Key Vocabulary		Unit 2	Symmetry	
Shape 2D, 3D Symmetry Corner Side Face Edge Vertex Straight Curved 2D shape names 3D shape names		Unit 3	3D Shapes	
Big Question Link		Vision and Values Link		
Year A: Look at the shape of different countries Year B: How can I use maths to help me?		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Place Value and Fractions

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: • Locate any number on a 1–100 grid or a 0–100 beaded line. • Compare numbers to at least 20. • Recognise, find, name a half as 1 of 2 equal parts of an object, shape, quantity. • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. Year 2 • Locate any 2-digit number on a 1–100 grid or a landmarked line; use this to order and compare numbers with <, > and = signs. • Count in halves and quarters, recognising fractions as numbers. • Begin to recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ on the number line and in other practical contexts.	Unit 1	Place Value	Work in books
Key Vocabulary		Unit 2	Fractions	
Compare Order <, >, = Number line Half, third, quarter				
Big Question Link		Vision and Values Link		
Year A: Look at which habitats in a zoo have the fewest/most animals Year B: Calculate total distances		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Addition and Subtraction

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Count on and back in tens from any 1-digit or 2-digit number, e.g. 23, 33, 43, 53... - Recognise the +, – and = signs; use these to read and write simple additions and - Solve missing number problems and addition/subtraction problems in number stories. Year 2 - Add a 2-digit number and tens; add two 2-digit numbers that total less than 100 by counting on in 10s and 1s. - Count back in ones or tens or use number facts to take away. - Begin to count up to find a difference between two numbers with a small gap, e.g. 42 – 38.	Unit 1	Addition	Work in books
Key Vocabulary				
Count on Count back Tens +, -, = 2-digit Number facts Difference Total		Unit 2	Subtraction	
Big Question Link		Vision and Values Link		
Year A: Where do frogs, spiders and flies live? Year B: Calculate total distances		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Multiplication and Division

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study Key Vocabulary Multiplication Division Commutative Inverse Repeated addition Jump	Year 1: - Count in 2s, 5s and 10s from 0. - Solve simple problems involving multiplication/ division, find answers with support using objects, pictorial representations or arrays. Year 2 - Count from 0 in steps of 2, 3, 5 and 10. - Know 2×, 5× and 10× tables, and related division facts, e.g. saying how many 10s in 40; use × and ÷ signs correctly. - Write multiplications and divisions, using ×, ÷ and = signs; calculate answers. - Understand that multiplication can be done in any order (it is commutative) and division cannot. - Solve multiplication/ division problems in context.	Unit 1	Multiplication and Division	Work in books
Big Question Link		Vision and Values Link		
Year A: Calculate groups of animals Year B: Calculate total distances		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Multiplication and Division

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study Key Vocabulary Left Right North South East West Clockwise Anticlockwise Full turn Half turn Quarter turn Three-quarter turn Digital Analogue Sequence	Year 1: - Tell the time to the half hour on analogue and digital clocks. - Sequence events in chronological order. Year 2 - Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. - Use mathematical vocabulary to describe position. - Distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	Unit 1	Position and Time	Work in books
Big Question Link		Vision and Values Link		
Year A: What order to you do things in at home? Year B: Which direction do I need to go to get there?		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Place Value and Addition

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Count on and back in ones to and from 100 and from any 1-digit or 2-digit number; given a number up to 100, identify one more and one less. - Count on and back in tens from any 1-digit or 2-digit number. - Compare numbers to at least 20. - Begin to be aware of unit patterns. - Know number bonds to 10. - Solve missing number problems. - Begin to know pairs which make 5, 6, 7, 8, 9 and 20. - Add small numbers by counting on. Year 2 - Read and write numbers to at least 100 in numerals. - Add a 2-digit number and tens; add two 2-digit numbers which total less than 100 by counting on in tens and ones. - Know different unit patterns when adding or subtracting, first when not crossing a ten and then when crossing a ten, in numbers up to 100. - Know securely number pairs for all the numbers up to and including 20. - Add two or three 1-digit numbers, using number facts and counting up.	Unit 1	Place value in 2-digit numbers	Work in books
Key Vocabulary		Unit 2	Add and subtract 1-digit numbers using patterns	
Number bonds Complement Number line Smaller/est Larger/est Add Subtract Total		Unit 3	Bonds to 10; complements to tens numbers	
		Unit 4	Adding three numbers – number games	
Big Question Link		Vision and Values Link		
Year A: When do we use maths at home? Year B: How are numbers used in distance?		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Subtraction and Using Money

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: • Begin to be aware of unit patterns. • Add small numbers by counting on. • Know number bonds to 10. • Begin to know pairs which make 5, 6, 7, 8, 9 and 20. • Recognise the + and – and = signs; use these to read and write simple additions and subtractions. • Solve missing number problems and addition/subtraction problems in number stories. • Recognise and know the value of different denominations of coins and notes. • Year 2 • Begin to count up to find a difference between two numbers with a small gap. • Recognise that addition and subtraction are inverse operations; use addition to check subtractions and solve missing number problems. • Know securely number pairs for all the numbers up to and including 20. • Add two or three 1-digit numbers, using number facts and counting up. • Recognise/use symbols for £ and p; combine amounts, find different combinations of coins that • Solve simple problems in a practical context; add and subtract pence. • Solve problems involving addition/subtraction of numbers, quantities and measures, using recall of number facts and appropriate models	Unit 1	Bridging ten and counting up subtraction	Work in books
Key Vocabulary		Unit 2	Finding totals	
Bridging Counting up Total Change Add Subtract Frog Partition Pound, £ Pence, p		Unit 3	Finding change	
Big Question Link		Vision and Values Link		
Year A: When do we use maths at home? Year B: How are numbers used in distance?		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Multiplication and division B

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Count in 2s, 5s, 10s. - Recognise doubles to double 6 and find related halves (half even numbers up to 12). - Solve simple problems involving multiplication/ division; find answers with support using objects, pictorial representations or arrays. - Recognise, find, name a half as 1 of 2 equal parts of a quantity. Year 2 - Know 2×, 5× and 10× tables, and related division facts, e.g. saying how many 10s in 40; use × and ÷ signs correctly. - Double and halve numbers up to 20 and multiples of 5 to 50; recognise odd and even numbers. - Write multiplications and divisions, using ×, ÷ and = signs; calculate answers. - Understand that multiplication can be done in any order (it is commutative) and division cannot. - Solve multiplication/ division problems in context.	Unit 1	Doubling and halving	Work in books
Key Vocabulary		Unit 2	Multiplication and division	
Double Half Multiply Divide Array Calculate Problem Group Share				
Big Question Link		Vision and Values Link		
Year A: When do we use maths at home? Year B: How are numbers used in distance?		To be able to use maths to make wise choices		

Big Question Link: Year A: What is home? Year B: Are we there yet?

Unit grid: Maths- Shape, Time and Data

Autumn/Spring/ Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Early Learning Goals for Mathematics Prior Key Stage 1 learning from the mathematics programme of study	Year 1: - Recognise the difference between 2-D and 3-D shapes; name and describe common 2-D and 3-D shapes. - Tell the time to the half hour on analogue and digital clocks. - Use the language of time including days, months, earlier, later, yesterday, minutes, hours, days, weeks and years. - Sequence events in chronological order. Year 2 - Identify/describe common 2-D shapes, referring to properties including on the surface of 3-D shapes; compare/sort 2-D shapes. - Identify/describe common 3-D shapes, referring to number of edges, vertices, faces (curved and flat); compare/sort 3-D shapes. - Order and arrange combinations of mathematical objects in patterns and sequences. - Tell/write the time on digital/analogue clocks to half past, quarter past and quarter to the hour; draw hands on a clock face to show these times. - Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. - Know the number of minutes in an hour and the number of hours in a day and use this to compare and sequence intervals of time. - Construct simple tables, pictograms, tally charts, block diagrams where unit scale is labelled in 1s or multiples of 2; interpret, ask and answer appropriate questions.	Unit 1	Exploring shape properties	Work in books
Key Vocabulary		Unit 2	Telling the time	
3D shape 3D shape names Edges, faces, vertices Digital Analogue Quarter past, half past, quarter to Pictogram Bar chart Tally chart Data		Unit 3	Units of time; data handling	
Big Question Link		Vision and Values Link		
Year A: When do we use maths at home? Year B: How long will it take to get there?		To be able to use maths to make wise choices		

Lower Key Stage 2

(Years 3 and 4)

Big Question: Year A: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Place Value

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – compare and order numbers up to 1,000 – identify, represent and estimate numbers using different representations – recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) – read and write numbers up to 1,000 in numerals and in words – solve number problems and practical problems involving these ideas – add and subtract amounts of money to give change, using both £ and p in practical contexts – find 10 or 100 more or less than a given number – add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s Year 4 – recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) – order and compare numbers beyond 1,000 – identify, represent and estimate numbers using different representations – solve number and practical problems that involve all of the above and with increasingly large positive numbers – find 1,000 more or less than a given number	Unit 1	Numbers on a line; compare and order	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	PV in 3-/4-digit numbers; amounts of money	
Number		Unit 3	+/- 1, 10, 100 and 1000, and multiples	
Place value				
Thousands				
Hundreds				
Tens				
Ones				
Place holder				
Number line				
Compare				
Order				
Identify				
Represent				
Estimate				
Recognise				
Digit				
Numerals				
Add				
Subtract				
More/less				
> < =				
Change				
Difference				
Big Question Link		Vision and Values Link		
Year A: Are numbers part of being human? Do any other beings use place value?		To develop aspiration by aiming to make more accurate estimations.		
Year B: How can numbers be used to control things?				

Big Question: Year A: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Addition and Subtraction A

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s – estimate the answer to a calculation and use inverse operations to check answers – solve problems, including missing number problems, using number facts and place value Year 4 – estimate and use inverse operations to check answers to a calculation – add and subtract numbers with up to 4 digits	Unit 1	Strategies for adding and subtracting	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Number bonds to 100	
Add		Unit 3	Subtract by counting up: frog	
Subtract				
Digit				
Calculate				
Inverse				
Estimate				
Commutative				
*Addend				
*Sum				
*Minuend				
*Subtrahend				
*Difference				
Number bonds				
Strategy				
Empty number line				
Doubles				
Near Doubles				
Big Question Link		Vision and Values Link		
Year A: What things do humans add or subtract, and why?		To develop wisdom when choosing a strategy for addition or subtraction.		
Year B: How are addition and subtraction used to control things?				

Addition

Subtraction

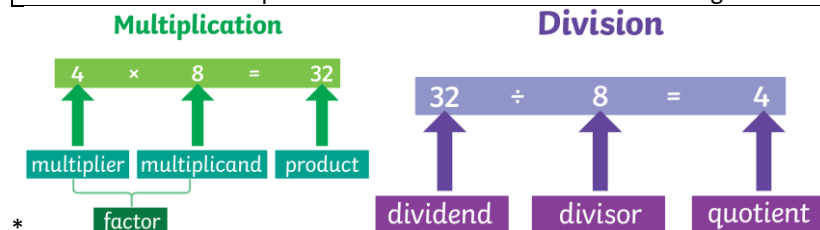


Big Question: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Multiplication and Division A

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 - recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables - write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental methods - solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems Year 4 - recall multiplication and division facts for multiplication tables up to 12×12 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers - multiply two-digit and three-digit numbers by a one-digit number	Unit 1	Rehearsing & understanding times tables	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Partitioning in multiplication and division	
Multiply Divide Inverse Commutative *Multiplier *Multiplicand *Product *dividend *divisor *quotient Times tables Grid method Partition Recombine				
Big Question Link		Vision and Values Link		
Year A: How do humans use times tables? Year B: How are multiplication and division used to control things?		To show endurance by rehearsing times tables.		



Big Question: Year A: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Fractions

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables – write and calculate mathematical statements for multiplication and division using the multiplication tables that they know – recognise and show, using diagrams, equivalent fractions with small denominators – recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators – recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators – solve problems that involve all of the above Year 4 – recall multiplication and division facts for multiplication tables up to 12×12 – use place value, known and derived facts to multiply and divide mentally – recognise and show, using diagrams, families of common equivalent fractions – solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	Unit 1	Doubling, halving and the concept of a half	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Conceptualising fractions	
Fraction		Unit 3	Finding fractions of amounts	
Parts				
Whole				
Double				
Half				
Thirds, quarters, fifths etc.				
Bar model				
Unit / non-unit				
Improper fraction				
Mixed number				
Equivalent				
Denominator				
Numerator				
Divide				
Multiply				
Big Question Link		Vision and Values Link		
Year A: Could you create a bar model to show what it means to be human? What fraction of a human is love/creativity/courage? Year B: Can you create a graph or chart to show what proportion of control you think different people have in the school?		To consider how fractions can help us to make wise choices, including sharing things fairly.		

Big Question: Year A: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Multiplication and Division B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables – write and calculate mathematical statements for division using the multiplication tables that they know Year 4 – recall multiplication and division facts for multiplication tables up to 12×12 – use place value, known and derived facts to divide mentally, including dividing by 1	Unit 1	Strategies for division	Written work in books. Class work on IWB / flipchart.
Key Vocabulary				
Divide Division *Dividend *Divisor *Quotient Sharing Grouping Partitioning Chunking				
Big Question Link		Vision and Values Link		
Year A: How do humans use division in real-life contexts? Year B: Can you share control between groups of people?		To learn wisely by using existing knowledge of times tables to build new understanding of division.		

Division

$$32 \div 8 = 4$$

* dividend divisor quotient

Big Question: Year A: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Addition and Subtraction B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s – find 10 or 100 more or less than a given number – recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) – add numbers with up to 3 digits, using formal written methods of columnar addition and subtraction – estimate the answer to a calculation and use inverse operations to check answers – solve problems, including missing number problems, using number facts and place value Year 4 – recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) – solve number and practical problems – add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	Unit 1	+/- near-/multiples of 10, 100, 1000	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Partitioning and column addition	
Add		Unit 3	Formal addition & subtraction algorithms	
Subtract				
More/less				
Digit				
Calculate				
Inverse				
Estimate				
Commutative				
*Addend				
*Sum				
*Minuend				
*Subtrahend				
*Difference				
Strategy				
Empty number line				
Formal written method (column)				
Big Question Link		Vision and Values Link		
Year A: What things do humans add or subtract, and why?		To develop wisdom when choosing a strategy for addition or subtraction.		
Year B: When are addition and subtraction used by people in control?				

Addition

Subtraction



Big Question: Year A: What does it mean to be human? Year B: Who is in control?

Unit grid: Maths – Shape

Autumn/Spring/Summer

Prior Learning Links		Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.		Year 3 – draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them – recognise angles as a property of shape or a description of a turn Year 4 – compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes – identify lines of symmetry in 2-D shapes presented in different orientations – complete a simple symmetric figure with respect to a specific line of symmetry – describe positions on a 2-D grid as coordinates in the first quadrant – describe movements between positions as translations of a given unit to the left/right and up/down – plot specified points and draw sides to complete a given polygon	Unit 1	Symmetry and 2D shapes	Written work in books. Class work on IWB / flipchart.
Key Vocabulary			Unit 2	Understanding 3D shapes	
Lines of symmetry	Angle		Unit 3	Coordinates in the first quadrant	
Symmetrical	Right angle				
Reflection	Face				
2D	Flat/curved				
Polygon	Edge				
Triangle (isosceles, equilateral, scalene)	Vertex/vertices				
Quadrilateral	3D				
(square, kite, rectangle, rhombus, parallelogram, trapezium)	Cube				
Pentagon	Cuboid				
Hexagon	Square-based pyramid				
Heptagon	Tetrahedron				
Octagon	(triangular-based pyramid)				
Circle	Cylinder				
Properties	Prism				
Regular	Sphere				
Irregular	Coordinate				
	Quadrant				
	x-axis				
	y-axis				
	Translation				
Big Question Link			Vision and Values Link		
Year A: What properties do humans have? Are humans symmetrical? Year B: Which shapes are used by architects in control of building designs and why?			To consider, accept and respect that people are different, just like shapes.		

Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Place Value and Fractions

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – solve number problems and practical problems – recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators – recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators – recognise and show, using diagrams, equivalent fractions with small denominators – add and subtract fractions with the same denominator within one whole [for example, [Fraction:5/7]+[Fraction:1/7] = [Fraction:6/7]] Year 4 – count backwards through 0 to include negative numbers – recognise and show, using diagrams, families of common equivalent fractions – solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number – add and subtract fractions with the same denominator – recognise and write decimal equivalents of any number of tenths or hundreds – recognise and write decimal equivalents to [Fraction:1/4], [Fraction:1/2], [Fraction:3/4]	Unit 1	Negative numbers	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Fractions	
Negative numbers		Unit 3	Equivalent fractions; +/- fractions	
Fraction Parts Whole Half, third, quarter etc. Tenths Bar model Unit / non-unit Improper fraction Mixed number Equivalent Denominator Numerator Divide Multiply Add Subtract				
Big Question Link		Vision and Values Link		
Year A: How do we use negative numbers? How do we use diagrams to show fractions?		To consider how fractions can help us to make wise choices, including sharing things fairly.		
Year B: How do numbers help us understand and compare sources of light?				

Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Addition and Subtraction A

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 - add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction Year 4 - solve addition and subtraction problems in contexts, deciding which operations and methods to use and why	Unit 1 2	Mental addition and subtraction	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	3-digit +/- 1-digit numbers	
Add Subtract Digit Calculate Commutative *Addend *Sum *Minuend *Subtrahend *Difference Number bonds Strategy Doubles Near Doubles				
Big Question Link		Vision and Values Link		
Year A: How do we use place value and known facts to help us add and subtract? Year B: Solve problems about hours of light around the world		Develop wisdom by selecting the most efficient method for subtraction.		



Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Measures

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g) – interpret and present data using bar charts and tables Year 4 – convert between different units of measure – estimate, compare and calculate different measures – interpret and present discrete data using appropriate graphical methods, including bar charts	Unit 1	Length and data	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Weight and data	
Metre (m) Centimetre (cm) Millimetre (mm) Kilometre (km) Height, length, width Further/furthest Higher/highest Longer/longest Shorter/shortest Taller/tallest Mass/weight Gram (g) Kilogram (kg) Lighter/heavier Table Bar chart Horizontal axis Vertical axis				
Big Question Link		Vision and Values Link		
Year A: How do we use a ruler/tape measure? How do we use weighing scales? How do we use bar charts? Year B: Create a bar chart to show average hours of sunlight per month		To make wise choices when selecting an appropriate unit of measure.		

Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Decimals and Money

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes	
KS1 programme of study for maths.	Year 3 – recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) – solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects – compare and order numbers up to 1,000 Year 4 – find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths – round decimals with 1 decimal place to the nearest whole number – compare numbers with the same number of decimal places up to 2 decimal places	Unit 1	x and ÷ with money and 1-place decimals	Written work in books. Class work on IWB / flipchart.	
Key Vocabulary		Unit 2	Decimals and money on a line		
Decimal					
Decimal point					
Place value					
Digit					
Tenths					
Hundredths					
Compare					
Order					
Number line					
Round					
Money					
Pounds					
Pence					
Big Question Link		Vision and Values Link			
Year A: How do we use a decimal point? How do we use money? Year B: How much does it cost to light up a room?		To develop wisdom with money.			

Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Multiplication

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables – write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods – solve problems, including missing number problems, involving multiplication and division Year 4 – recall multiplication and division facts for multiplication tables up to 12×12 – use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers – recognise and use factor pairs and commutativity in mental calculations – multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Unit 1	Times tables and factors	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Partitioning in multiplication	
Multiply Commutative *Multiplier *Multiplicand *Product Times tables Grid method Ladder method Partition Recombine				
Big Question Link		Vision and Values Link		
Year A: How do we use formal written methods of multiplication? Year B: Look at pictures of light arrays and link to multiplication		To demonstrate endurance by continuing to develop more fluent recall of multiplication facts.		

Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Addition and Subtraction B

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction – add and subtract amounts of money to give change, using both £ and p in practical contexts – add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s – solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction Year 4 – add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate – solve simple measure and money problems involving fractions and decimals to 2 decimal places – estimate, compare and calculate different measures, including money in pounds and pence – estimate and use inverse operations to check answers to a calculation – solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Unit 1	Column addition	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Frog and decomposition	
Add Subtract More/less Digit Calculate Inverse Estimate Commutative *Addend *Sum *Minuend *Subtrahend *Difference Strategy Empty number line Formal written method (column)				
Big Question Link		Vision and Values Link		
Year A: How do we use formal written methods of addition? Year B: Solve problems linked to hours of sunlight and the cost of lights		To aspire to add and subtract bigger numbers more efficiently.		



Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Division

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables – write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers – solve problems, including missing number problems, involving multiplication and division – recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Year 4 – recall multiplication and division facts for multiplication tables up to 12×12 – recognise and use factor pairs and commutativity in mental calculations – solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	Unit 1	Division	Written work in books. Class work on IWB / flipchart.
Key Vocabulary				
Divide Division *Dividend *Divisor *Quotient Sharing Grouping Partitioning Chunking				
Big Question Link		Vision and Values Link		
Year A: How do we use times tables to solve division problems? Year B: Link to light arrays		To develop wisdom by applying knowledge in different contexts.		

Division

$$32 \div 8 = 4$$

* **dividend** **divisor** **quotient**

Big Question: Year A: How do we use...? Year B: What lights up the world?

Unit grid: Maths – Time

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks – estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight – know the number of seconds in a minute – compare durations of events [for example, to calculate the time taken by particular events or tasks] – interpret and present data using bar charts, pictograms and tables – solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables Year 4 – read, write and convert time between analogue and digital 12- and 24-hour clocks – solve problems involving converting from hours to minutes, minutes to seconds – interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs – solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Unit 1	Telling the time	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Time and data	
Second Minute Hour Digital Analogue 12-hour 24-hour Duration Bar chart Pictogram Table Data Horizontal axis Vertical axis Key				
Big Question Link		Vision and Values Link		
Year A: How do we use a clock?		How do we manage our time wisely?		
Year B: How can we use timers to set lights and save electricity?				

Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Number and Place Value

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) – compare and order numbers up to 1,000 – identify, represent and estimate numbers using different representations – read and write numbers up to 1,000 in numerals and in words – count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number – solve number problems and practical problems involving these ideas Year 4 – recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) – order and compare numbers beyond 1,000 – round any number to the nearest 10, 100 or 1,000 – count in multiples of 6, 7, 9, 25 and 1,000 – read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	Unit 1	Number and Place Value	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Sequences and Roman Numerals	
Number Place value Thousands Hundreds Tens Ones Place holder Number line Compare Order Identify Represent Estimate Recognise Digit Numerals Roman numerals Sequence Count Add Subtract Difference				
Big Question Link		Vision and Values Link		
Year A: What’s more important – water or maths? Year B: What is stronger – water or maths?		To develop wisdom by considering how number systems have changed over time.		

Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Addition and Subtraction A

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction – estimate the answer to a calculation and use inverse operations to check answers – add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s Year 4 – add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate – estimate and use inverse operations to check answers to a calculation – solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Unit 1	Written algorithms	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Finding a difference – whole numbers	
Add Subtract More/less Digit Calculate Inverse Estimate Commutative *Addend *Sum *Minuend *Subtrahend *Difference Strategy Empty number line Formal written method (column)				
Big Question Link		Vision and Values Link		
Year A: What’s more important – water or maths?		To demonstrate endurance when developing fluency in formal written methods.		
Year B: What is stronger – water or maths?				

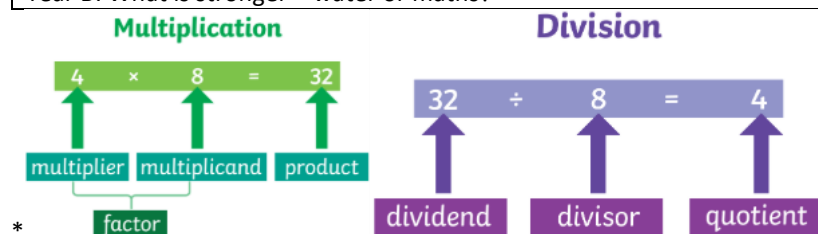


Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Multiplication and Division A

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables – write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods – solve problems, including missing number problems, involving multiplication and division Year 4 – recall multiplication and division facts for multiplication tables up to 12×12 – use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers – recognise and use factor pairs and commutativity in mental calculations	Unit 1	Times tables, factors and multiples	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Division	
Multiply				
Divide				
Inverse				
Commutative				
*Multiplier				
*Multiplicand				
*Product				
*dividend				
*divisor				
*quotient				
Factor				
Multiple				
Times tables				
Partition				
Recombine				
Big Question Link		Vision and Values Link		
Year A: What’s more important – water or maths? Year B: What is stronger – water or maths?		To use known facts wisely to solve problems.		



Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Decimals

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – read and write numbers up to 1,000 in numerals and in words – solve number problems and practical problems – solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction – measure, compare, add and subtract lengths (m/cm/mm) – add and subtract amounts of money to give change, using both £ and p in practical contexts Year 4 – find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths – round decimals with 1 decimal place to the nearest whole number – compare numbers with the same number of decimal places up to 2 decimal places – solve simple measure and money problems involving fractions and decimals to 2 decimal places	Unit 1	Decimals and Money	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Decimals and Measures	
Decimal Decimal point Decimal places Place value Digit Tenths Hundredths Compare Order Number line Round Money Pounds Pence Change				
Big Question Link		Vision and Values Link		
Year A: What’s more important – water or maths? Year B: What is stronger – water or maths?		To be able to use maths to make wise choices, including with money and accurate measurements.		

Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Measures and Data

Autumn/Spring/Summer

Prior Learning Links		Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.		Year 3 – measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) – measure the perimeter of simple 2-D shapes – tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks – estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight – know the number of seconds in a minute and the number of days in each month, year and leap year – compare durations of events – interpret and present data using bar charts, pictograms and tables – solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables	Unit 1	Area and perimeter	Written work in books. Class work on IWB / flipchart.
Key Vocabulary			Unit 2	Time	
Area	Month		Unit 3	Line graphs and bar charts	
Perimeter	January				
Centimetres	February				
Metres	March				
Squares	April				
Distance	May				
Millimetres	June				
Kilometres	July				
Length	August				
Width	September				
Rectilinear	October				
Second	November				
Minute	December				
Hour	Year				
Day	Leap year				
Monday	Decade				
Tuesday	Century				
Wednesday	Bar chart				
Thursday	Line graph				
Friday					
Week					
Fortnight					
Big Question Link			Vision and Values Link		
Year A: What's more important – water or maths? Year B: What is stronger – water or maths?			To aspire to measure accurately.		

Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Shape

Autumn/Spring/Summer

Prior Learning Links		Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.		Year 3 – draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them – recognise angles as a property of shape or a description of a turn – identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle – identify horizontal and vertical lines and pairs of perpendicular and parallel lines Year 4 – compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes – identify acute and obtuse angles and compare and order angles up to 2 right angles by size – identify lines of symmetry in 2-D shapes presented in different orientations – complete a simple symmetric figure with respect to a specific line of symmetry – describe positions on a 2-D grid as coordinates in the first quadrant – describe movements between positions as translations of a given unit to the left/right and up/down – plot specified points and draw sides to complete a given polygon	Unit 1	Exploring shape properties	Written work in books. Class work on IWB / flipchart.
Key Vocabulary			Unit 2	Co-ordinates and 3D shapes	
Angles Turns (quarter, half, full) Clockwise Anticlockwise 90 degrees Right angle Acute Obtuse Triangle (isosceles, equilateral, scalene) Quadrilateral (square, kite, rectangle, rhombus, parallelogram, trapezium)	Lines of symmetry Symmetrical Reflection Vertical Horizontal Perpendicular Parallel Properties Regular Irregular Face Edge Vertex/vertices Coordinate Quadrant x-axis y-axis Translation				
Big Question Link			Vision and Values Link		
Year A: What shape is water? Year B: How does water shape an environment and make it stronger?			Is it wise to look from just one angle?		

Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Addition and Subtraction B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s – add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction – estimate the answer to a calculation and use inverse operations to check answers – solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction Year 4 – add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate – estimate and use inverse operations to check answers to a calculation – solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why – solve problems involving multiplying and adding	Unit 1	Money: finding change and differences	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Written addition and subtraction	
Add Subtract Digit Calculate Inverse Estimate Commutative *Addend *Sum *Minuend *Subtrahend *Difference Strategy Empty number line Formal written method (column)				
Big Question Link		Vision and Values Link		
Year A: What’s more important – water or maths? Year B: What is stronger – water or maths?		To demonstrate endurance when developing fluency in formal written methods.		

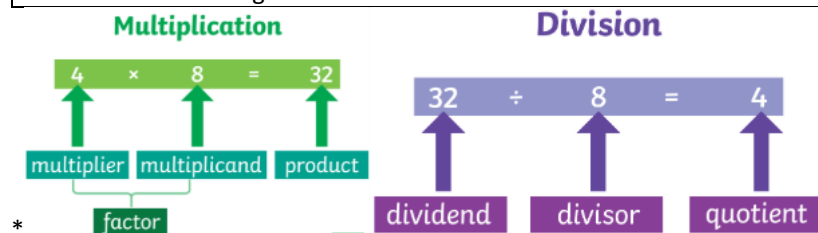


Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Multiplication and Division B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 - recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables - write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods - solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects Year 4 - recall multiplication and division facts for multiplication tables up to 12×12 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers - recognise and use factor pairs and commutativity in mental calculations - solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	Unit 1	Partitioning to double, halve and multiply	Written work in books. Class work on IWB / flipchart.
Key Vocabulary		Unit 2	Scaling problems and mental strategies	
Multiply Divide Inverse Commutative *Multiplier *Multiplicand *Product *dividend *divisor *quotient Factor Times tables Partition Recombine Scaling				
Big Question Link		Vision and Values Link		
Year A: What's more important – water or maths? Year B: What is stronger – water or maths?		To use known facts wisely to solve problems.		



Big Question: Year A: What's so important about water? Year B: What is stronger – people or their environment?

Unit grid: Maths – Fractions

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
KS1 programme of study for maths.	Year 3 – count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 – recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators – recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators – recognise and show, using diagrams, equivalent fractions with small denominators – add and subtract fractions with the same denominator within one whole [for example, [Fraction:5/7]+[Fraction:1/7] = [Fraction:6/7]] – solve problems that involve all of the above Year 4 – recognise and show, using diagrams, families of common equivalent fractions – count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 – solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number – add and subtract fractions with the same denominator – recognise and write decimal equivalents of any number of tenths or hundreds – recognise and write decimal equivalents to [Fraction:1/4], [Fraction:1/2], [Fraction:3/4]	Unit 1	Fractions	Written work in books. Class work on IWB / flipchart.
Key Vocabulary				
Fraction Parts Whole Double Half Thirds, quarters, fifths etc. Tenths Bar model Unit / non-unit Improper fraction Mixed number Equivalent Denominator Numerator Add Subtract Divide Multiply				
Big Question Link		Vision and Values Link		
Year A: What’s more important – water or maths? Year B: What is stronger – water or maths?		To consider how fractions can help us to make wise choices.		

Upper Key Stage 2

(Years 5 and 6)

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Place value

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 -Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit -Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 -Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 Year 6 -Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit -Round any whole number to a required degree of accuracy	Unit 1	Place value	-Written work in books
Key Vocabulary		Unit 2	Place value	
Order Compare Round Value Digit < > Number line				
Biq Question Link		Vision and Values Link		
Year A: How do we use maths in the world? Year B: How was maths used during the war?		To be able to use maths to make wise choices		

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Addition and subtraction A

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 -add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) -use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy -solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Year 6 -solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Mathematics -solve problems involving addition, subtraction, multiplication and division -use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.	Unit 1	Column addition with whole numbers	-Written work in books
Key Vocabulary		Unit 2	Column addition with money and decimals	
Column addition Rounding Estimate Column subtraction Exchange		Unit 3	Column subtraction and counting up	
Biq Question Link		Vision and Values Link		
Year A: How do we use money to live? Year B: How has money changed since WWII?		To be able to use maths to make wise choices with money		

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Decimals

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 -recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents -round decimals with two decimal places to the nearest whole number and to one decimal place -read, write, order and compare numbers with up to three decimal places -solve problems involving number up to three decimal places Year 6 - identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places - solve problems which require answers to be rounded to specified degrees of accuracy	Unit 1	Place value in 2- and 3- digit decimal numbers	-Written work in books
Key Vocabulary		Unit 2	Count/add/subtract 0.1, 0.01 and 0.001	
Decimals		Unit 3	Place value in decimals	
Whole		Unit 4	Rounding and adding decimals	
Tenth				
Hundredth				
Thousandth				
Ones				
Round				
Estimate				
Compare				
Order				
Multiply				
Divide				
Biq Question Link		Vision and Values Link		
Year A: How do we use decimals in daily life?		To be able to use decimals to live life in all its fullness		
Year B: How do we use decimals in daily life?				

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Multiplication and Division

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 Know and recite all times tables including division facts; identify multiples and factors, including common factors of two numbers. 13. Identify prime numbers up to 100 and know primes up to 19; understand the vocabulary of prime and composite numbers; identify prime factors. Multiply 2, 3, 4-digit numbers by numbers ≤ 26 using long or short multiplication or grid method. 21. Solve problems involving multiplication and division, using knowledge of factors, multiples. Perform divisions mentally in range of tables; use remainders, fractions, decimal equivalences. Year 6 Know all multiplication and division facts up to 12×12 ; identify common factors, common multiples, square numbers to 144 and prime numbers up to 20. Multiply 2-digit, 3-digit and 4-digit numbers by numbers up to 12 using short multiplication or another appropriate written method. Multiply/divide whole numbers mentally, using facts to 12×12 & place value (e.g. 60×70); use facts to work with larger numbers.	Unit 1	Properties of numbers, including primes	-Written work in books
Key Vocabulary		Unit 2	Written multiplication strategies	
Times table Division facts Prime numbers Common factors Prime factors Remainders Fractions		Unit 3	Mental division strategies	
Biq Question Link		Vision and Values Link		
Year A: What does maths tell us about how people live? Year B: What does maths tell us about how people used to live?		To be able to use maths to make wise choices		

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Addition and subtraction B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Subtract 1- and 2-place decimal numbers in the context of money by counting up. +/- subtract mentally with confidence, where numbers are <100 or the calculation relies upon simple +/- & place value, e.g. giving change. -Subtract 1- and 2-place decimal numbers by counting up: 6.2 – 3.5, 13.1 – 9.45. - +/- mentally with confidence, where numbers are < 100 or the calculation relies upon simple +/- & place value. Subtract larger numbers using expanded or compact column subtraction, or by counting up. Solve addition/subtraction multi-step problems; decide which operations/methods to use and why. Solve problems involving addition, subtraction, multiplication, division & a combination, including understanding the meaning of the equals sign. Year 6 - Consolidate: Add and subtract mentally with confidence, where numbers are < 100 or it relies upon simple +/- & place value. Solve addition/subtraction multi-step problems in context, deciding which operations to use and why. - Subtract decimal numbers using mental strategies or written counting up. Find the complement to 1, or to next whole number, for a number < 10 with up to 3 decimal places. - Consolidate: Add and subtract mentally with confidence, where numbers are < 100 or it relies upon simple +/- & place value. Solve addition/subtraction multi-step problems in context, deciding which operations to use and why. Perform mental calculations, including with mixed operations and large numbers; carry out calculations using knowledge of the order of operations and brackets. Solve problems involving all 4 operations.	Unit 1	Money: counting up, change, differences	-Written work in books
Key Vocabulary		Unit 2	Subtract numbers with 1 or 2 decimal places	
Subtract Decimal numbers Mentally <100 Expanded Compact Counting up Solve problems Equal sign Consolidate Multi-step problems		Unit 3	Strategies for +/-; word problems	
Biq Question Link		Vision and Values Link		
Year A: How do we make decisions? Year B: How is maths used to help make decisions?		Make a decision about how to solve a problem		

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Multiplication and division B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Use efficient mental methods to multiply two or three numbers. - Perform divisions mentally in range of tables. - Scale up/down by a factor of 2, 5 or 10; solve problems involving scaling up/down by simple fractions & problems involving simple rates. - Solve problems involving multiplication and division, using knowledge of factors, multiples. - Divide 2, 3, 4-digit numbers by 1-digit numbers above tables range; choose & use efficient methods; interpret remainders appropriately according to context. Year 6 - Multiply/divide whole numbers mentally, using facts to 12×12 & place value (e.g. 60×70); use facts to work with larger numbers. - Scale up or down by a factor of 2, 4, 5 or 10; solve scaling problems and those involving rates. - Perform divisions mentally within the range of tables facts; divide multiples of 10 & 100 ($4500 \div 9$) & use mental strategies such as halving ($450 \div 20$). - Divide numbers with up to 4-digits by a number up to 12 using short division and giving an appropriate answer. - Interpret remainders as whole number remainders, fractions, including decimal fractions where equivalents are known or by rounding up or down.	Unit 1	Mental multiplication and division; Problem solving	-Written work in books
Key Vocabulary		Unit 2	Written division strategies	
Times table Division facts Remainders Fractions Rounding Multiply Divide Product				
Biq Question Link		Vision and Values Link		
Year A: How are multiplication and division used in daily life? Year B: How was maths used during the war?		Make a decision about how to solve a problem		

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Fractions

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Identify, name & write equivalent fractions; reduce fractions to simplest form, including tenths to fifths, hundredths to tenths, e.g. $40/100 = 4/10 = 2/5$. - Compare and order fractions where the denominators are multiples of the same number. - Solve problems involving fractions, using known equivalences to help. - Recognise mixed numbers and improper fractions and convert from one to the other, writing mathematical statements. - Solve problems involving fractions, using known equivalences to help. - Compare and order fractions where the denominators are multiples of the same number. - Add and subtract fractions where the denominators are multiples of the same number. Year 6 - Use common multiples to generate equivalent fractions, e.g. $4/8 = 1/2$; reduce fractions to their simplest form using common factors. - Use knowledge of equivalence to compare/order fractions. - Associate a fraction with division; calculate decimal fraction equivalents, e.g. $4/5$ is 0.8, $1/8$ is 0.125 - Identify simple fraction/decimal/percentage equivalents: E.g. $1/4 = 0.25 = 25\%$, $1/3 = 0.33 = 33\%$ - Associate a fraction with division; calculate decimal fraction equivalents, e.g. $4/5$ is 0.8, $1/8$ is 0.125 - Use common multiples to generate equivalent fractions, e.g. $4/8 = 1/2$; reduce fractions to their simplest form using common factors. - Use knowledge of equivalence to compare/order fractions and to add or subtract fractions and mixed numbers.	Unit 1	Order fractions; fractions of amounts	-Written work in books
Key Vocabulary		Unit 2	Decimal/fraction equivalents	
Fraction Unit fraction Non-unit fraction Numerator Denominator Equivalent Simplify Calculate		Unit 3	Add/subtract fractions using equivalence	
Biq Question Link		Vision and Values Link		
Year A: How are fractions and decimals used in daily life? Year B: How were fractions and decimals used during the war?		Understand when it is wise to use fractions to speed up mathematical processes		

Big Question Link: Year A: How do we live? Year B: Evacuee or refugee?

Unit grid: Maths: Shape

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Understand properties of rectangles & triangles; distinguish between regular and irregular polygons based on reasoning about equal sides/angles. - Find unknown angles in triangles and rectangles; identify angles round a point and on a straight line, finding missing angles. - Know angles are measured in degrees, estimate and compare acute, obtuse and reflex angles, draw and measure given angles. - Identify 3-D shapes from 2-D representations. - Identify, describe, represent position of a shape following a reflection or translation, use appropriate language; know that the shape is unchanged. Year 6 - Compare & classify geometric shapes based on their properties; classify & name types of triangle & angle (acute, obtuse, reflex). - Identify, illustrate & name parts of circles, including diameter, circumference & radius, understanding that the radius is half the diameter. - Draw 2-D shapes, using given dimensions and angles; understand terms parallel and perpendicular. - Find unknown angles in triangles, quadrilaterals & regular polygons; also find missing angles at a point, vertically opposite or on a straight line. - Recognise, describe and build 3-D simple shapes, including making nets. - Identify positions on the full co-ordinate grid; draw and translate simple shapes and reflect them in the x-axis or y-axis. - Begin to reason mathematically making simple generalisations, using mathematical language and making connections between mathematical ideas.	Unit 1	Quadrilaterals, other polygons, Circles	-Written work in books
Key Vocabulary		Unit 2	Find missing angles and draw 2D shapes	
Polygon		Unit 3	Sort 3D shapes; nets and 3D shapes	
Angle		Unit 4	Coordinates: Polygons and transformations	
Vertices				
Vertex				
Edge				
Face				
Corner				
Side				
Angle				
Acute				
Obtuse				
Right angle				
Reflex				
Net				
2D				
3D				
Property				
Coordinate				
X-axis				
Y-axis				
Reflect				
Translate				
Transformation				
Quadrant				
Biq Question Link		Vision and Values Link		
Year A: How are shapes used in architecture and engineering?		Understand how shapes can be used wisely to strengthen structures		
Year b: How are shapes used in architecture and engineering related to war?				

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Place value

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Locate numbers up to 10 million on a landmarked line; use this to compare/order numbers. - Round to ten, a hundred and a thousand, ten thousand, one hundred thousand or a million, as appropriate. - Count forwards or backwards in steps of powers of 10 for any given number greater than 1,000,000. 4. Solve number and practical problems involving place value, rounding and negative numbers. - Solve number problems and practical problems involving place value. - Begin to read scales of different types; solve scaling problems involving measures. - Interpret negative numbers in context, counting backwards and forwards through zero. Year 6 - Locate numbers up to 10 million on a landmarked line; use this to compare/order numbers. - Round to ten, a hundred and a thousand, ten thousand, one hundred thousand or a million, as appropriate. - Solve number and practical problems involving place value, rounding and negative numbers. - Use negative numbers in context, calculate intervals across zero. - Solve number and practical problems involving place value, rounding and negative numbers.	Unit 1	Place value	-Written work in books
Key Vocabulary				
Million M, HTh, TTh, Th, H, T, O Number line Round Compare Order Greater than, > Less than, < Negative numbers				
Biq Question Link		Vision and Values Link		
Year A: How is the climate crisis affecting temperature? Year B: How is temperature different around the world?		How can we give back to the community and protect the world?		

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Calculation Strategies

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Solve problems involving addition, subtraction, multiplication, division and a combination, including understanding the meaning of the equals sign. - Confidently add numbers with up to 4 or 5 digits using column addition, including adding ‘piles’ of numbers. - Subtract larger numbers using expanded or compact column subtraction, or by counting up. - Use rounding to check answers and determine levels of accuracy. Year 6 - Perform mental calculations, including with mixed operations. Carry out calculations using knowledge of the order of operations and brackets. - Add several large numbers using written addition, including ‘piles of numbers’ with different numbers of digits. - Subtract large numbers using decomposition or counting up if appropriate (200,000 – 196,875).	Unit 1	Use of brackets in calculations	-Written work in books
Key Vocabulary				
Brackets () BODMAS Order of operations Column addition Column subtraction Exchange Counting up Difference Sum				
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion?		How can we use maths to support us to make wise decisions in life?		
Year B: What is the total distance of journeys made up of ‘legs’?				

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Decimals and fractions

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Subtract 1 and 2 place decimal numbers by counting up: 6.2 – 3.5, 13.1 – 9.45. - Identify, name and write equivalent fractions; reduce fractions to simplest form. - Compare and order fractions where the denominators are multiples of the same number. - Solve problems involving fractions. - Multiply proper fractions and mixed numbers by whole numbers supported by materials and diagrams. Year 6 - Subtract decimal numbers using mental strategies or written counting up. - Find the complement to 1, or to next whole number, for a number <10 with up to 3 decimal places. - Use common multiples to generate equivalent fractions. - Use knowledge of equivalence to compare/order fractions. - Identify simple fraction and decimal equivalents. - Associate a fraction with division. Calculate decimal fraction equivalents, e.g. 4/5 is 0.8, 1/8 is 0.125. - Calculate simple percentages of whole numbers. Solve problems involving use of percentages for comparisons. - Understand that if 2 numbers less than 1 are multiplied, the answer is smaller than either of them. - Multiply simple pairs of proper fractions, writing the answer in its simplest form. - Divide proper fractions by whole numbers, recognising that 3/4 ÷ by 2 is equivalent to 3/4 × 1/2.	Unit 1	Frog for decimals	-Written work in books
Key Vocabulary		Unit 2	Explore fractions, decimals and percentages	
Subtract Decimal Fraction Percentage Simplify Simplest form Compare Order Numerator Denominator Equivalent Proper fractions Multiply Divide Complement		Unit 2	Multiply and divide fractions	
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion? Year B: How are decimals and fractions used in distance?		How can we use maths to support us to make wise decisions in life?		

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Time and data

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Solve problems involving converting between units of time; use 12-hour and 24-hour times, find time intervals and tell the time with confidence. - Complete, read and interpret information in tables, including timetables. - Create and interpret line graphs, solving comparison, sum and difference problems. Year 6 - Solve problems involving converting between units of time; use 12-hour and 24-hour times, find time intervals and tell the time with confidence. - Complete, read and interpret information in tables, including timetables. - Create and interpret line graphs, solving comparison, sum and difference problems.	Unit 1	Time and timetables	-Written work in books
Key Vocabulary				
12-hour clock 24-hour clock Time interval Duration Timetable Tables Line graphs Compare Sum Difference Problems Pie chart		Unit 2	Line graphs and pie charts	
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion?		How can we use maths to support us to make wise decisions in life?		
Year B: How can charts and graphs help us to calculate distances?				

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Multiplication

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Know and recite all times tables including division facts; identify multiples and factors, including common factors of two numbers. - Use efficient mental methods to multiply two or three numbers. - Multiply 2-, 3-, 4-digit numbers by numbers ≤ 26 using long or short multiplication or the grid method. Year 6 - Know all multiplication and division facts up to 12×12 ; identify common factors, common multiples, square numbers to 144 and prime numbers up to 20. - Multiply/divide whole numbers mentally, using facts to 12×12 and place value (e.g. 60×70); use facts to work with larger numbers. - Multiply numbers with up to 4 digits by 2-digit numbers using formal long multiplication.	Unit 1	Multiples, factors and mental strategies	-Written work in books
Key Vocabulary				
Times tables Multiplication facts Multiple Factor Common factor Mental method Grid method Short multiplication Long multiplication Common multiple Square numbers Cubed numbers		Unit 2	Multiplication	
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion? Year B: How far can you multiply?		How can we use maths to support us to make wise decisions in life?		

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Measures

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Measure and compare capacities, weights and lengths; convert between different SI units. - Understand and use approximate equivalences between common imperial and SI units. - Create and interpret line graphs, solving comparison, sum and difference problems. - Measure and calculate perimeters of composite rectilinear shapes using SI units. - Understand the concept of area, estimate areas of irregular shapes and count squares to find these; calculate areas of rectangles using standard units. - Estimate volumes of cubes and cuboids. Year 6 - Use, read and write, and convert between, standard units including miles and kilometres, using decimal numbers with up to three places as appropriate. - Solve problems using standard units and convert between them. - Interpret and construct (pie charts and) line graphs and use these to solve problems. - Measure areas and perimeters; understand that area is a measurement of covering and is measured in square units, and perimeter is a length, measured in mm, cm, m or km; recognise that shapes with the same area can have different perimeters and vice versa. - Calculate the area of parallelograms and triangles. - Calculate, estimate and compare volume of cubes and cuboids using standard units, cm ³ , m ³ , mm ³ and km ³ .	Unit 1	Units of measurement	-Written work in books
Key Vocabulary		Unit 2	Area, perimeter, scaled shapes	
Capacity Weight Imperial Metric Kg/g/m/km/l/ml/ miles Area Perimeter Rectilinear Regular Irregular Volume Estimate		Unit 3	Finding volumes	
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion? Year B: What do we use maths to convert between units of measurement?		How can we use maths to support us to make wise decisions in life?		

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Multiplication and Division

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Divide 2-, 3- and 4-digit numbers by 1-digit numbers above tables range; choose and use efficient methods; interpret remainders appropriately according to context. - Multiply 2-, 3-, 4-digit numbers by numbers ≤ 26 using long or short multiplication or the grid method. - Divide 2-, 3- and 4-digit numbers by 1-digit numbers above tables range; choose and use efficient methods; interpret remainders appropriately according to context. Year 6 - Divide numbers with up to 4 digits by a number up to 12 using short division and giving an appropriate answer. - Divide numbers with up to 4 digits by 2-digit numbers using a formal written method of long division and giving an appropriate answer. - Use estimation to check answers and determine an appropriate degree of accuracy. - Multiply numbers with up to 4 digits by 2-digit numbers using formal long multiplication. - Divide numbers with up to 4-digits by a number up to 12 using short division and giving an appropriate answer. - Divide numbers with up to 4 digits by 2-digit numbers using a formal written method of long division and giving an appropriate answer.	Unit 1	Division	-Written work in books
Key Vocabulary				
Divide Multiply Approximate Round Remainder Fraction Decimal Short multiplication Long multiplication Short division Long division Express			Unit 2	
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion?		How can we use maths to support us to make wise decisions in life?		
Year B: How can I divide distances into legs of a journey?				

Big Question Link: Year A: What do you believe? Year B: How far can you go?

Unit grid: Maths: Algebra and Ratio

Autumn/**Spring**/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Solve problems involving addition, subtraction, multiplication, division and a combination, including understanding the meaning of the equals sign. - Compare and order fractions where the denominators are multiples of the same number. Year 6 - Use simple formulae, including formulae expressed in words. - Solve missing number problems, including where letters are used to replace constants. - Find pairs of numbers that satisfy an equation with two unknowns and list, in order, the possibilities of combinations of two variables. - Identify simple fraction/decimal/percentage equivalents, e.g. $\frac{1}{4} = 0.25 = 25\%$, $\frac{1}{3} = 0.33 = 33\%$. - Calculate simple percentages of whole numbers; solve problems involving use of percentages for comparisons. - Solve problems involving simple ratios, using tables facts and knowledge of fractions and multiples, e.g. 2 eggs for every 250g of flour.	Unit 1	Algebra	-Written work in books
Key Vocabulary				
Algebra Ratio Formulae Equation Variables Linear Number sequence Fractions Percentages Proportion				
Biq Question Link		Vision and Values Link		
Year A: What role does maths play in religion? Year B: How can I express part of a journey as a fraction or percentage?		How can we use maths to support us to make wise decisions in life?		

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Revision A

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Interpret negative numbers in context, counting backwards and forwards through zero. - Read, write and locate 5- and 6-digit numbers on a landmarked line; use this to compare/order numbers; recognise the value of each digit. - Round any number less than 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000. - Confidently add numbers with up to 4 or 5 digits using column addition, including adding 'piles' of numbers. - Subtract larger numbers using expanded or compact column subtraction, or by counting up. - Use rounding to check answers and determine levels of accuracy. - Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why. - Solve problems involving addition, subtraction, multiplication, division and a combination, including understanding the meaning of the equals sign. - Read Roman numerals and recognise years written in Roman numerals. - Multiply 2-, 3-, 4-digit numbers by numbers ≤ 26 using long or short multiplication or grid method; multiply 2-digit by 2-digit numbers using grid method. - Divide 2-, 3-, 4-digit numbers by 1-digit numbers above tables range; choose/use efficient methods; interpret remainders appropriately according to context. Year 6 - Use negative numbers in context, calculate intervals across zero. - Solve number and practical problems involving place value, rounding and negative numbers. - Locate numbers up to 10 million on a landmarked line; use this to compare/order numbers. - Round to 10, 100, 1000, 10,000, 100,000 or 1,000,000, as appropriate. - Add several large numbers using written addition, including 'piles of numbers' with different numbers of digits. - Subtract large numbers using decomposition or counting up if appropriate (200,000 – 196,875). - Solve addition and subtraction multi-step problems in context, deciding which operations to use and why. - Use estimation to check answers and determine an appropriate degree of accuracy. - Solve problems involving all four operations. - Identify the place value of each digit in a number with up to 3 decimal places; multiply/divide numbers by 10, 100, 1000 giving answers with up to 3 decimal places. - Multiply numbers such as 4.7 and 0.06 by whole numbers. - Multiply 2-, 3- and 4-digit numbers by numbers up to 12 using short multiplication or another appropriate written method. - Multiply numbers with up to 4 digits by 2-digit numbers using formal long multiplication. - Perform divisions mentally within the range of tables facts; divide multiples of 10 and 100 ($4500 \div 9$) and use mental strategies such as halving ($450 \div 20$).	Unit 1	Numbers and place value	-Written work in books
Key Vocabulary		Unit 2	Addition and subtraction	
Negative number Rounding Place value Addition Subtraction Multiplication Division Roman Numerals I, V, X, D, C, M Long multiplication Short multiplication Long division Short division Efficiency 10 million Place value Decimal Remainder Fraction		Unit 3	Decimals, multiplication and division	

	- Interpret remainders as whole number remainders, fractions, including decimal fractions where equivalents are known or by rounding up or down. - Divide numbers with up to 4-digits by a number up to 12 using short division and giving an appropriate answer. - Divide numbers with up to 4 digits by 2-digit numbers using a formal written method of long division; give an appropriate answer.			
Biq Question Link			Vision and Values Link	
Year A: How are numbers written in Spanish? Year B: What does it mean to get a majority or a landslide in an election?			How can we use maths to support us to make wise decisions in life?	

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Revision B

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Identify, name, write equivalent fractions - Reduce fractions to simplest form - Recognise mixed numbers and improper fractions and convert from one to the other - Solve problems involving addition, subtraction, multiplication, division and a combination, including understanding the meaning of the equals sign - Complete, read and interpret information in tables. - Create and interpret line graphs, solving comparison, sum and difference problems. - Measure and calculate perimeters of composite rectilinear shapes using SI units. - Understand the concept of area, estimate areas of irregular shapes and count squares to find these; calculate areas of rectangles using standard units - Find unknown angles in triangles and rectangles; identify angles around a point and on a straight line, finding missing angles. - Know angles are measured in degrees, estimate and compare acute, obtuse and reflex angles, draw and measure given angles. Year 6 - Scale up or down by a factor of 2, 4, 5 or 10 - Solve scaling problems. - Calculate simple percentages of whole numbers and solve problems involving use of percentages for comparisons. - Solve problems involving similar shapes where the scale factor is known or can be found. - Solve problems involving simple ratios, using tables facts and knowledge of fractions and multiples - Use knowledge of equivalence to compare and order fractions and to add and subtract fractions and mixed numbers. - Understand that if two numbers less than 1 are multiplied, the answer is smaller than either of them. - Multiply simple pairs of proper fractions, writing the answer in its simplest form. - Divide proper fractions by whole numbers, recognising that $\frac{3}{4} \div 2$ is equivalent to $\frac{3}{4} \times \frac{1}{2}$. - Interpret and construct pie charts and line graphs and use these to solve problems. - Solve missing number problems, including where letters are used to replace constants. - Find pairs of numbers that satisfy an equation with two unknowns and list, in order, the possibilities of combinations of two variables. - Generate, describe and continue linear sequences. - Use simple formulae, including formulae expressed in words.	Unit 1	Fractions, ratio and percentages	-Written work in books
Key Vocabulary		Unit 2	Charts, graphs and algebra	
Addition Subtraction Multiplication Division Remainder Fraction Ratio Scale factor Equivalent Improper fraction Mixed number Percentage Calculate Frequency table Tally chart Bar chart Line chart Bar line chart Pictogram Pie chart Algebra Equation Bar model Sequence Area Perimeter Rectilinear Angle Quadrilateral Opposite angle		Unit 3	Area, perimeter and angles	

	- Measure areas and perimeters. Understand that area is a measurement of covering and is measured in square units, and perimeter is a length, measured in mm, cm, m or km. Recognise that shapes with the same area can have different perimeters and vice versa. - Find unknown angles in triangles, quadrilaterals and regular polygons; also find missing angles at a point, vertically opposite or on a straight line.			
Biq Question Link		Vision and Values Link		
Year A: How are numbers written in Spanish?		How can we use maths to support us to make wise decisions in life?		
Year B: What does it mean to get a majority or landslide in an election?				

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Top-up revision menu

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Know and recite all times tables including division facts; identify multiples and factors, including common factors of two numbers. - Identify prime numbers up to 100 and know primes up to 19; understand the vocabulary of prime and composite numbers; identify prime factors. - Multiply 2-, 3- and 4-digit numbers by numbers ≤ 26 using long or short multiplication or grid method. - Divide 2-, 3- and 4-digit numbers by 1-digit numbers above tables range; choose/use efficient methods; interpret remainders appropriately according to the context. - Identify, name, write equivalent fractions; reduce fractions to simplest form - Complete, read and interpret information in tables. - Interpret and construct pie charts use these to solve problems. - Find and interpret the mean (average) of several quantities. - Identify, describe and represent the position of a shape following a reflection or translation, using appropriate language; know that shape is unchanged. - Estimate volumes of cubes and cuboids. Year 6 - Know all multiplication and division facts up to 12×12; identify common factors, common multiples, square numbers to 144 and prime numbers up to 20. - Multiply 2-, 3- and 4-digit numbers by numbers up to 12 using short multiplication or another appropriate written method. - Multiply numbers with up to 4 digits by 2-digit numbers using formal long multiplication. - Interpret remainders as whole number remainders, fractions, including decimal fractions where equivalents are known or by rounding up or down. - Divide numbers with up to 4 digits by a number up to 12 using short division and giving an appropriate answer. - Divide numbers with up to 4 digits by 2-digit numbers using a formal written method of long division and giving an appropriate answer. - Use knowledge of equivalence to compare and order fractions. - Identify simple fraction/decimal/percentage equivalents - Interpret and construct pie charts use these to solve problems.	Unit 1	Factors, multiples, primes and squares	-Written work in books
Key Vocabulary		Unit 2	Multiplication and division	
Factor Multiple Prime number Square number Multiplication Division Remainder Rounding Fraction Decimal Percentage Equivalence Pie Chart Mean Transformation Co-ordinate Quadrant Volume Common factor Common multiple Predict		Unit 3	Fraction-decimal-% equivalence	
		Unit 4	Data: pie charts and mean	

	- Find and interpret the mean (average) of several quantities. - Identify positions on the full co-ordinate grid; draw and translate simple shapes and reflect them in the x-axis or y-axis. - Use simple formulae, including formulae expressed in words. - Calculate, estimate and compare the volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres; extend to other units	Unit 5	Transformations and co-ordinates	
		Unit 6	Volume	
Biq Question Link		Vision and Values Link		
Year A: How are numbers written in Spanish? Year B: How can you represent vote information on a chart?		How can we use maths to support us to make wise decisions in life?		

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Decimals, addition and subtraction

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Write decimal numbers as tenths, hundredths, thousandths - Measure and compare capacities, weights and lengths; convert between different SI units. - Subtract 1- and 2-place decimal numbers by counting up - Write decimal numbers as tenths and hundredths. - Confidently add numbers with up to 4 or 5 digits using column addition. - Subtract larger numbers using expanded or compact column subtraction, or by counting up. - Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why. - Solve problems involving addition, subtraction, multiplication, division and a combination, including understanding the meaning of the equals sign. Year 6 - Identify the place value of each digit in a number with up to 3 decimal places; multiply/divide numbers by 10, 100, 1000 giving answers with up to 3 decimal places. - Begin to reason mathematically making simple generalisations, using mathematical language and making connections between mathematical ideas. - Subtract decimal numbers using mental strategies or written counting up. - Add several large numbers using written addition, including ‘piles of numbers’ with different numbers of digits. - Subtract large numbers using decomposition or counting up if appropriate - Perform mental calculations, including with mixed operations and large numbers; carry out calculations using knowledge of the order of operations and brackets. - Begin to reason mathematically making simple generalisations, using mathematical language and making connections between mathematical ideas	Unit 1	Exploring decimals	-Written work in books
Key Vocabulary		Unit 2	Smashing subtraction	
Unit of measurement Km, m, kg, g, cm, mm Compare Order Subtraction Rounding Decimal Addition		Unit 3	Accomplished addition	
Biq Question Link		Vision and Values Link		
Year A: How are numbers written in Spanish? Year B: How do votes compare?		How can we use maths to support us to make wise decisions in life?		

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Number properties and Multiplication

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Recognise and use square and cube numbers and the matching notation. - Scale up or down by a factor of 2, 5 or 10; solve problems involving scaling up/down by simple fractions and problems involving simple rates.	Unit 1	Number properties	-Written work in books
Key Vocabulary Square number Cube number Scale Efficiency Factor Multiple Written method Grid method Goldbach's conjecture Rates Napier's bones Common multiple Common factor	- Use efficient mental methods to multiply two or three numbers. - Solve problems involving multiplication and division, using knowledge of factors, multiples, square and cube numbers. - Multiply 2, 3, 4-digit numbers by numbers ≤ 26 using long or short multiplication or the grid method; multiply 2-digit by 2-digit numbers using the grid method. - Solve problems involving multiplication and division. Year 6 - Identify prime numbers up to 20. - Solve scaling problems and those involving rates. - Identify, illustrate and name parts of circles, including diameter, circumference and radius, understanding that the radius is half the diameter. - Begin to reason mathematically making simple generalisations, using mathematical language, making connections between mathematical ideas. - Interpret and construct pie charts and line graphs and use these to solve problems. - Multiply 2-, 3- and 4-digit numbers by numbers up to 12 using short multiplication or another appropriate written method. - Multiply numbers with up to 4 digits by 2-digit numbers using formal long multiplication.	Unit 2	Exploring multiplication	
Biq Question Link		Vision and Values Link		
Year A: How are numbers written in Spanish?		How can we use maths to support us to make wise decisions in life?		
Year B: Solve scaling problems about votes				

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Division, Fractions and Percentages

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Divide 2-, 3-, 4-digit numbers by 1-digit numbers above tables range; choose and use efficient methods; interpret remainders appropriately according to context. - Compare and order fractions where the denominators are multiples of the same number - Recognise mixed numbers and improper fractions and convert from one to the other, writing mathematical statements. Year 6 - Add and subtract fractions where the denominators are multiples of the same number. - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. - Identify simple fraction and percentage equivalents - Solve problems involving fractions, decimals and percentages, using known equivalences to help.	Unit 1	Division done	-Written work in books
		Unit 2	Calculating with fractions	
		Unit 3	Mastering percentages	
Key Vocabulary Divide Compare Order Fraction Denominator Mixed number Improper fraction Add Subtract Equivalent Multiply Percentage Formal method	Year 6 - Divide numbers with up to four digits by a number up to 12 using short division and giving an appropriate answer. - Divide numbers with up to four digits by 2-digit numbers using a formal written method of long division and giving an appropriate answer. - Use knowledge of equivalence to compare and order fractions and to add and subtract fractions and mixed numbers. - Understand that if two numbers less than 1 are multiplied, the answer is smaller than either of them. - Multiply simple pairs of proper fractions, writing the answer in its simplest form. - Identify simple fraction/decimal/percentage equivalents - Associate a fraction with division; calculate decimal fraction equivalents. - Calculate simple percentages of whole numbers and solve problems involving use of percentages for comparisons.			
Biq Question Link		Vision and Values Link		
Year A: How are numbers written in Spanish?		How can we use maths to support us to make wise decisions in life?		
Year B: How can you represent vote information using fractions and percentages?				

Big Question Link: Year A: ¿Qué hizo que los mayas fueran increíbles? Year B: What would you vote for?

Unit grid: Maths: Measures, shapes, data

Autumn/Spring/Summer

Prior Learning Links	Key NC Objectives	Session overviews		Unit Outcomes
Y3/4 programme of study for maths	Year 5 - Solve problems involving converting between units of time; use 12- and 24-hour times, find time intervals and tell the time with confidence. - Complete, read and interpret information in tables, including timetables. - Create and interpret line graphs, solving comparison, sum and difference problems. Year 6 - Use 12- and 24-hour clocks including analogue with Roman numerals; calculate time intervals; use timetables. - Interpret and construct line graphs and use these to solve problems. - Find unknown angles in triangles, quadrilaterals and regular polygons; also find missing angles at a point, vertically opposite or on a straight line.	Unit 1	It's time!	-Written work in books
		Unit 2	Line graphs	
		Unit 3	Understanding angles	
Key Vocabulary 12-hour clock 24-hour clock Roman numerals Time interval Timetable Line graph Table Angle Polygon				
Biq Question Link		Vision and Values Link		
Year A: How are numbers written in Spanish?		How can we use maths to support us to make wise decisions in life?		
Year B: Can you represent vote information in a table or graph?				