Mathematics programmes of study: KS 1 and 2

What do we aim to achieve? (Our intent)

Mathematics is essential for everyday life. It is critical to science, technology and engineering, and is valued in most forms of employment.

A high-quality mathematics education provides a foundation for understanding the world and the ability to reason mathematically.

We want our pupils to **become fluent** in the fundamentals, developing the ability to recall and apply knowledge rapidly and accurately. We want them to **reason mathematically** and be able to justify their mathematical arguments. We want them to **solve problems** by applying their maths with increasing confidence and sophistication.
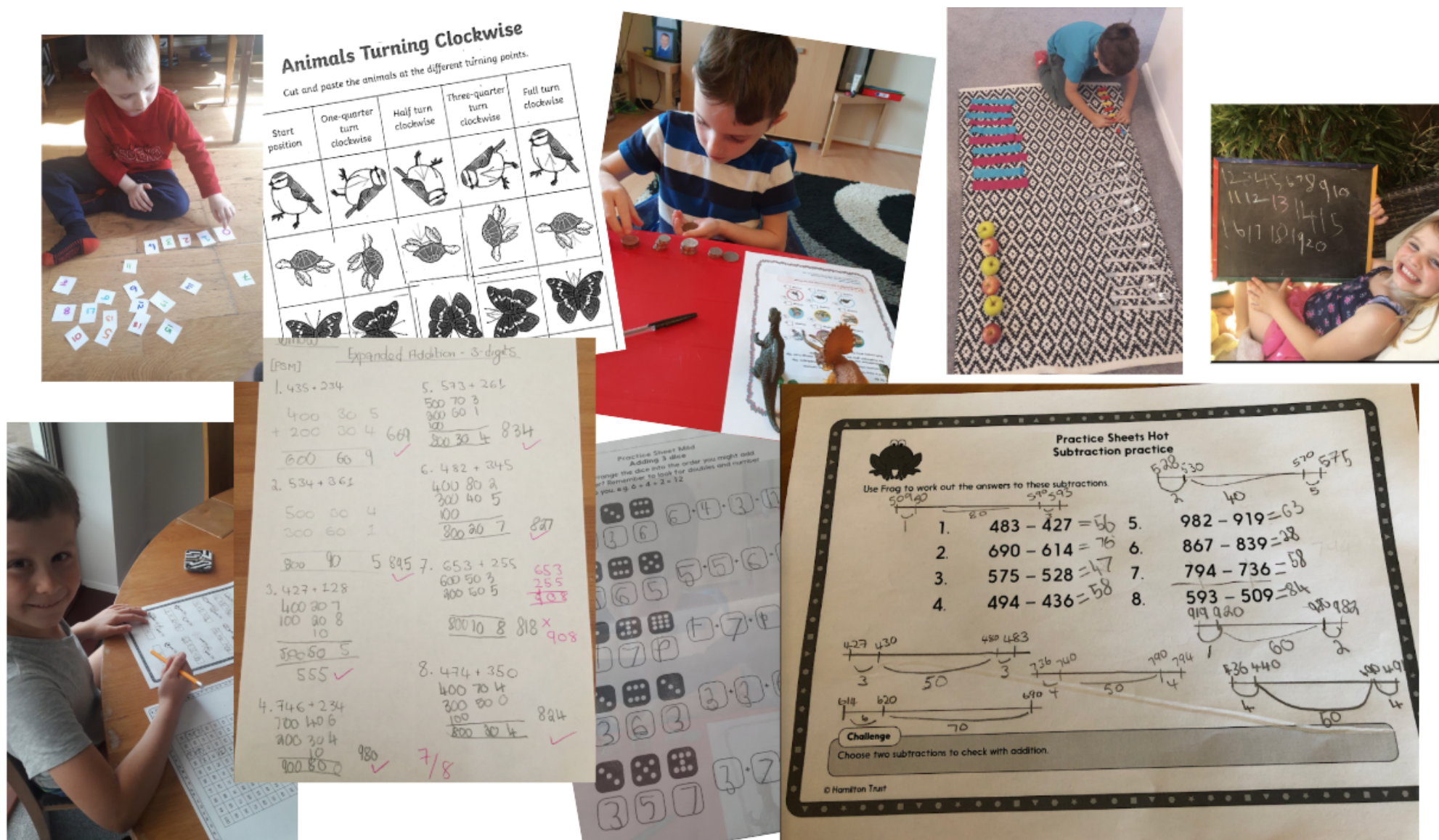
How do we do it?   (Our implementation)

We use the Hamilton Trust Scheme of work as the basis of our planning across KS 1 and 2, which ensures the varied and frequent practice of increasingly complex problems over time, so that pupils develop the conceptual understanding and ability to recall and apply knowledge rapidly and accurately. Within each Key Stage teachers are able to use flexibility to introduce content slightly earlier or later than set out in the programme of study in order to meet the needs of their cohort. We use practical resources and adapt planning carefully to ensure that pupils' needs are met. Maths is an interconnected subject, both within itself, and across other subjects and wherever possible we draw links throughout the curriculum.

What is the impact of this learning?

Our pupils develop fluency, mathematical reasoning and competence to solve increasingly sophisticated problems. They enjoy applying their mathematical knowledge to other subjects. They develop their mathematical vocabulary and are able to confidently present mathematical justification for their decisions and answers.

Look what we have been learning about

During Lockdown, our pupils were keen to continue using their mathematical studies through our Google Classroom activities.
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Mathematics programmes of study: KS 1 and 2

YEAR	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Counting aloud 0-20 and back; number recognition; ordering numbers 0-20; counting objects (1:1 correspondence); copying & continuing simple colour and shape patterns; height	Counting aloud 0-30; one more and one less than given number; 2D and 3D shapes; money; estimating; length	Counting aloud to 40; addition and subtraction using objects; symmetrical patterns; positional language; time - daily events; data handling	Counting aloud to 50; weight; teen numbers; time - o'clock/half past; doubling; number formation; sorting 2D & 3D shapes	Counting aloud to 70; counting in 10's and 2's; addition and subtraction using a number line and 100 square; halving and sharing; capacity	Counting aloud to 100; measure height of sunflowers & record; odd and even numbers; number bonds to 5 and 10; missing numbers; money

What does each lesson cover and how does it link together over time? NC aims for Key Stage 1 (Years 1 and 2) :

To **become fluent** in the fundamentals of mathematics; to **reason mathematically** by following a line of enquiry and developing an argument; to **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

1M: number and place value
2M: addition and subtraction
3M: multiplication and division (including scaling or square/cube numbers or multiples and factors)
4M: fractions, decimals, percentages or ratio
5M: measurement and statistics (including lengths and height; mass/weight; capacity and volume; time; money; sequencing events; graphs, charts, pictograms and tables)
6M: geometry- properties of shapes; position and direction

Theme	AUTUMN TERM		
KS1 Yr 1	**1** 1. Count on and back in ones to and from 20 and from any number <20; given a number up to 20, identify one more and one less. 4. Locate any number on a beaded line 0-100. 5. Compare numbers to at least 20. 6. Read and write numbers to 20 in numerals and read numbers in words to 20. **2** 8. Begin to know pairs which make 5 and 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 11. Add small numbers by counting on. **3** 11. Add small numbers by counting on. 19. Tell the time to the hour on both analogue and digital clocks. 21. Sequence events in chronological order. 22. Recognise and know the value of different denominations of coins up to 20p. **4** 17. Compare objects according to height and length using appropriate mathematical language. 18. Count uniform non-standard, then simple standard units to measure length and height. Recognise line symmetry and create symmetrical patterns	**5** 1. Count on and back in ones to and from 20 and from any number <20; given a number up to 20, identify one less. 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 11. Subtract small numbers by counting back. 12. Solve missing number problems and addition/subtraction problems in number stories. **6.** 4. Locate any number on a beaded line 0-20. 5. Compare numbers to at least 20. 1. 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 and one less. 2. Count in 10s from 0 to 100. 15. Recognise, find, name a half as 1 of 2 equal parts of an object, shape, quantity. 16. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. **7.** 13. Recognise doubles to double 5 and find related halves (half even numbers up to 10). 2. Count in 2s from 0 to 20. Begin to recognise odd and even numbers 20. Use the language of time including days, months, earlier, later, yesterday, weeks and years. **8** 24. Recognise the difference between 2-D and 3-D shapes; name and describe common 2-D shapes. 23. Sort items into lists or tables.	**9** 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 11. Add small numbers by counting on and subtract small numbers by counting back. 1. 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 and one less. 8. Begin to know pairs which make 6. **10** 8. Begin to know pairs which make 7. 7. 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. 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 11. Add small numbers by counting on. Realise that addition can be done in any order. **11** 1. 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 and one less. 7. 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.
Yr 2	**1.** 2. Count on in 10s from any number 3. Identify any number on 1-100 grid; understand that each is a multiple of ten and some ones 4. Locate any 2-digit number on a beaded and a landmarked line; use this to order and compare numbers with <, > and = signs. 6. Use place value and number facts to solve problems. **2** 14. Recognise that addition and subtraction are inverse operations; solve missing number problems. 7. Know securely number pairs for all the numbers up to and including 20, e.g. pairs which make 7, 8, 9, 10 and 20 2. Count on in 10s from any number 3. Identify any number on 1-100 grid; understand that each is a multiple of ten and some ones. **3** 27. Recognise coins, combine amounts, find different combinations of coins that give the same amount. 28. Solve simple problems in a practical context; add and subtract pence, including finding and giving change. 29. Tell/write time on digital/analogue clocks to ½ & ¼ past & ¼ to the hour; draw hands on a clock face to show times.	**5** 7. Know securely number pairs for all numbers to 20 (pairs to 10) 6. Use place value and number facts to solve problems, e.g. adding to the next 10 12. Begin to count up to find a difference between two numbers, adding to the next multiple of ten. 14. Recognise that addition and subtraction are inverse operations; solve missing number problems. 10. Add a two-digit number and tens; add two 2-digit numbers that total < 100 by counting on in 10s and 1s. 11. Count back in ones or tens to take away, e.g. 27-11 = or 54-20 =. **6** 1. Count from 0 in steps of 2 and 10. 18. Recognise odd and even numbers 36. Order and arrange combinations of mathematical objects in patterns and sequences. 21. Solve multiplication problems in context, using arrays and 'clever counting'. 23. Begin to recognise the equivalence of 2/4 and ½ on the number line and in other practical contexts. 24. Understand ½, ¼, ¾ as fractions of quantities in practical context; solve problems using shapes, objects, quantities. **7** 18. Double and halve numbers up to 30; recognise odd and even numbers. 31. Know number of seconds in a minute and minutes in an hour	**9** 2. Count on and back in 10s from any number 10. Add a two-digit no. and tens; add two 2-digit numbers that total < 100 by counting on in 10s and 1s. 6. Use place value and number facts to solve problems, e.g. 3 + 4 = 7, 24 + 3 = 27, etc. 11. Count back in ones or tens to take away, e.g. 27-11 = or 54-20 =. 15. Solve problems involving addition & subtraction of nos, using recall of number facts and appropriate models & images. **10** 7. Know securely number pairs for all the numbers up to 10, e.g. pairs which make 8 (4+4, 3+5, 2+6, 1+7). 8. 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 11. Count back in ones or use number facts to take away, e.g. 27-3 = 10. Add a two-digit number and tens; add two 2-digit numbers that total < 100 by counting on in 10s & 1s. 15. Solve problems involving addition and subtraction of numbers, using recall of number facts and appropriate models and images.

	4 25. Choose/use appropriate standard units to estimate and measure length/height, to the nearest appropriate unit using rulers, instruments. 26. Compare and order objects according to length, using suitable units, and record the results using >, < and = . 28. Solve simple problems in a practical context; add and subtract pence, including finding and giving change. 10. Add a two-digit no. and tens; add two 2-digit numbers that total < 100 by counting on in 10s and 1s.	and use this to compare and sequence intervals of time. 32. Construct simple tables; interpret, ask and answer appropriate questions. **8** 33. Identify and describe common 2-D shapes, referring to their properties, including on the surface of 3-D shapes; compare and sort 2-D shapes 34. Recognise symmetry in a vertical line	**11** 7. Know securely number pairs for all the numbers up to and including 20. 14. Recognise that addition and subtraction are inverse operations; solve missing number problems 6. Use place value and number facts to solve problems. 15. Solve problems of addition & subtraction of nos, quantities & measures, using recall of no. facts & appropriate models/images.
Theme	**SPRING TERM**		
KS1 Yr 1	**1.** 1. Count on and back in ones to and from 20 and from any number <20; given a number up to 20, identify one more and one less. 2. Count in 10s from 0. 3. 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. 6. Read and write numbers to100 in numerals and read numbers in words to 20. **2** 7. Know number bonds to 10. Know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. 8. Begin to know pairs which make 8 and 9 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 11. Add small numbers by counting on; subtract small numbers by counting back. 12. Solve missing number problems and addition/subtraction problems in number stories. 13. Recognise doubles to double 6 and find related halves (half even numbers up to 12). **3** 3. 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. 7. Know number bonds to 10. Know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. 11. Add small numbers by counting on. 22. Recognise and know the value of different denominations of coins up to 20p. **4** 17. Compare objects according to weight using appropriate mathematical language. 18. Count uniform non-standard, then simple standard units to measure weight. 19. Tell the time to the half hour on analogue and digital clocks.	**5** 2. Count in 2s from 0. 13. Recognise doubles to double 6 and find related halves (half even numbers up to 12). 15. Recognise, find, name a half as 1 of 2 equal parts of an object, shape, quantity. **6.** 4. Locate any number on a 1-100 grid or a beaded line 0-100. 5. Compare numbers to at least 20. 6. Read and write numbers to 100 in numerals and read numbers in words to 20. **7** 22. Recognise and know the value of different denominations of coins. 7. Know number bonds to 10, e.g. 5 + 5, 6 + 4, etc. Also know what is left if objects are taken from 10, 11. Add small numbers by counting on. 12. Solve addition/subtraction problems in number stories. 3. 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. Begin to understand the concept of difference and change and find a difference between two numbers **8** 17. Compare objects according to capacity, using appropriate mathematical language. 18. Count uniform non-standard, then simple standard units to measure capacity.	**9** 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 8. Begin to know pairs which make 7, 8 and 9. 7. Know number bonds to 10. Know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. 12. Solve missing number problems and addition/ subtraction problems in number stories. 13. Recognise doubles to double 6 and find related halves (half even numbers up to 12). 3. 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. **10** Realise that addition can be done in any order. (Not in HAT, nor on NC but needed in Y2) 7. Know number bonds to 10. Know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. 9. Begin to be aware of unit patterns, e.g. 2 + 4 = 6, 7 + 4 = 11, 12 + 4 = 16 , 17 + 4 = 21, 22 + 4 = 26 etc. 27 + 4 = 31 etc. 11. Add small numbers by counting on. 12. Solve missing number problems and addition/subtraction problems in number stories. **11** 5. Compare numbers to at least 20. 17. Compare objects according to height, length using appropriate mathematical language. 18. Count uniform non-standard, then simple standard units to measure length and height.. Begin to understand the concept of difference by counting up from smaller to larger number
Yr 2	**1** 4. Locate any 2-digit number on a beaded and a landmarked line; use this to order and compare nos with <, > & = signs. 5. Read and write numbers to at least 100 in numerals; make recognisable attempts to write in words. 6. Use place value and number facts to solve problems. 10. Add a two-digit no. and tens; add two 2-digit nos that total < 100 by adding near multiples of 10 15. Solve problems involving addition and subtraction of numbers, quantities and measures, using recall of number facts and appropriate models and images. **2** 6. Use place value and number facts to solve problems, e.g. 60 - = 20 7. Know securely number pairs for numbers up to and including 20, e.g. pairs which make 12 8. 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. 11. Count back in ones or use number facts to take away, e.g. 27-3 =. **3** 4. Locate any 2-digit number on a 1-100 grid or a landmarked line 10. Add a two-digit no. and tens; add two 2-digit numbers that total < 100 by counting on in 10s and 1s. 11. Count back in tens and ones or use number facts to take away 15. Solve problems involving addition and subtraction of numbers, using appropriate models and images.	**5** 1. Count from 0 in steps of 2 and 5. 16. Know 2x, 5x and 10x tables, and related division facts, e.g. how many 10s in 40; use x and ÷ signs correctly. 19. Write multiplications and divisions, using x, ÷ and = signs; calculate answers. 20. Understand that multiplication can be done in any order (commutative) and division cannot. 21. Solve multiplication/division problems in context, using recall of x /÷ facts, doubling, halving, arrays, 'clever counting'. **6** 3. Identify any number on 1-100 grid; understand that each is a multiple of ten and some ones. 4. Locate any 2-digit number on a 1-100 grid or a landmarked line; use this to order/compare numbers with <, > and = signs. 5. Read and write numbers to at least 100 in numerals; make recognisable attempts to write in words. 24. Understand ½, ¼, ¾ as fractions of quantities in practical context; solve problems using shapes, objects, quantities. **7** 27. Recognise/use symbols for pounds (£) & pence (p); combine amounts, find diff combinations of coins to give the same amount. 10. Add a two-digit no. and tens; add two 2-digit nos that total < 100 by counting on in 10s & 1s. 28. Solve simple problems in a practical context; add and subtract pence, incl. finding and giving change. 11. Count back in ones or tens to take away, e.g. 54-20 =. 12. Begin to count up to find a difference between two numbers with a small gap, e.g. 20 – 14	**9** 19. Write multiplications and divisions, using x, ÷ and = signs; calculate answers. 20. Understand that multiplication can be done in any order (commutative) and division cannot. 21. Solve multiplication/division problems in context, using recall of x /÷ facts, doubling, halving, arrays, 'clever counting'. 17. Understand equivalence in simple calculations: 3 x 4 = 6 x □ **10** 7. Know securely number pairs for all the numbers up to and including 20, e.g. pairs which make 15 8. Know different unit patterns when adding or subtracting, first not crossing a ten, then crossing a ten, in nos <100. 9. Add two or three single-digit numbers, using number facts and counting up. 11. Count back in ones or tens or use number facts to take away, e.g. 27-3 = or 54-20 =. 13. Show that addition of 2 numbers can be done in any order (commutative) and subtraction cannot. **11** 10. Add a two-digit no. and tens; add two 2-digit numbers that total < 100 by counting on in 10s and 1s. 12. Begin to count up to find a difference between two numbers with a small gap, e.g. 42–38.

	4 25. Choose/use appropriate standard units to estimate/measure weight, to nearest appropriate unit using balances and scales 26. Compare and order objects according to weight, using suitable units, and record the results using >, < and = . 37. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line. 38. Distinguish between rotation as a turn and in terms of right angles for quarter, half & three-quarter turns (clockwise & anticlockwise	**8** 25. Choose/use appropriate standard units to estimate and measure capacity to the nearest appropriate unit 26. Compare and order objects according to capacity using suitable units, and record the results using >, < and = . 32. 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.	

| Theme | **SUMMER TERM** |||

| KS1 Yr 1 | **1.** 5. Compare numbers to at least 20. 3. 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. 15. Recognise, find, name a half as 1 of 2 equal parts of an object, shape, quantity. 16. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

2. 3. 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. 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 12. Solve missing number problems and addition/subtraction problems in number stories.

3. 7. 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. 9. Begin to be aware of unit patterns, e.g. 2 + 4 = 6, 7 + 4 =11, 12 + 4 = 16, 17 + 4 = 21, 22 + 4 = 26 etc. 27 + 4 = 31 etc. 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 11. Add small numbers by counting on and subtract small numbers by counting back. 12. Solve missing number problems and addition/subtraction problems in number stories.

4. 24. Recognise the difference between 2-D and 3-D shapes; name and describe common 2-D and 3-D shapes. 19. Tell the time to the half hour on analogue and digital clocks. | **5.** 2. Count in 2s, 5s and 10s from 0. 14. Solve simple problems involving multiplication/division, find answers with support using objects, pictorial representations or arrays.

6. 22. Recognise and know the value of different denominations of coins. 7. 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. 8. Begin to know pairs which make 5, 6, 7, 8, 9 and 20. 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions. 3. 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. 12. Solve missing number problems and addition/subtraction problems in number stories. 9. Begin to be aware of unit patterns, e.g. 2 + 4 = 6, 7 + 4 = 11, 12 + 4 = 16, 17 + 4 = 21, 22 + 4 = 26 etc. 27 + 4 = 31 etc. 11. Add small numbers by counting on and subtract small numbers by counting back.

7. 7. Know number bonds to 10. Know what is left if objects are taken from 10, e.g. 10 fingers, fold down 4, leaves 6 standing. 9. Begin to be aware of unit patterns, e.g. 2 + 4 = 6, 7 + 4 = 11, 12 + 4 = 16, 17 + 4 = 21, 22 + 4 = 26 etc. 27 + 4 = 31 etc. 10. Recognise the + and – and = signs, and use these to read and write simple additions and subtractions.

8. 20. Use the language of time including days, months, earlier, later, yesterday, minutes, hours, days, weeks and years. 19. Tell the time to the half hour on analogue and digital clocks. 21. Sequence events in chronological order. | **9.** 13. Recognise doubles to double 6 and find related halves (half even numbers up to 12). 15. Recognise, find, name a half as 1 of 2 equal parts of an object, shape, quantity. 14. Solve simple problems involving multiplication/division, find answers with support using objects, pictorial representations or arrays.

10. 3. 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. 7. 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. 8. Begin to know pairs which make 5, 6, 7, 8, 9 and 20. 12. Solve missing number problems and addition/subtraction problems in number stories. 22. Recognise and know the value of different denominations of coins. Begin to understand the concept of change and find a difference between two amounts.

11. 24. Recognise the difference between 2-D and 3-D shapes; name and describe common 2-D and 3-D shapes. 25. Describe position, direction and movement, including whole, half, quarter and three-quarter turns. 20. Use the language of time including days, months, earlier, later, yesterday, minutes, hours, days, weeks and years. 21. Sequence events in chronological order. |

| Yr 2 | **1.** 4. Locate any 2-digit number on a 1-100 grid or a landmarked line; use this to order/ compare numbers with <, > and = signs. 22. Count in halves and quarters, recognising fractions as numbers. 23. Begin to recognise the equivalence of 2/4 and ½ on the number line and in other practical contexts. 24. Understand ½, ¼, 1/3, ¾, 2/3 as fractions of quantities in a practical context; solve problems using shapes, objects, quantities.

2 18. Double and halve numbers up to 20 and multiples of 5 to 50; recognise odd & even numbers. 10. Add a two-digit number and tens; add two 2-digit nos that total < 100 by counting on in 10s and 1s. 11. Count back in ones or use number facts to take away, e.g. 27-3 =.

3 12. Begin to count up to find a difference between two numbers with a small gap, e.g. 42–38. 14. Recognise that addition and subtraction are inverse operations; use addition to check subtractions 28. Solve simple problems in a practical context; add and subtract pence, incl. finding and giving change

4 35. Identify/describe common 3-D shapes, referring to no. of edges, vertices, faces (curved and flat); compare/sort 3-D shapes. 29. Tell/write the time on digital/analogue clocks to ½ past, ¼ past & ¼ to the hour 30. Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. | **5** 16. Know 2x, 5x and 10x tables, and related division facts, e.g. how many 10s in 40; use x and ÷ signs correctly. 19. Write multiplications and divisions, using x, ÷ and = signs; calculate answers.

6. 1. Count from 0 in steps of 2, 3, 5 and 10 3. Identify any number on 1-100 grid; understand that each is a multiple of ten and some ones. 4. Locate any 2-digit number on a 1-100 grid or a landmarked line; use this to order/compare numbers with <, > and = signs. 5. Read and write numbers to at least 100 in numerals; make recognisable attempts to write in words.

7 10. Add a two-digit no. and tens; add two 2-digit nos that total < 100 by counting on in 10s & 1s. 11. Count back in ones or tens to take away, e.g. 54-20 =. 12. Begin to count up to find a difference between two numbers with a small gap, e.g. 20 – 14 28. Solve simple problems in a practical context; add and subtract pence, incl. finding and giving change.

8 32. 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. 30. Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. 31. 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. | **9** 18. Double and halve numbers up to 20 and multiples of 5 to 50; recognise odd & even numbers. 16. Know 2x, 5x and 10x tables, and related division facts, e.g. how many 10s in 40; use x and ÷ signs correctly. 19. Write multiplications and divisions, using x, ÷ and = signs; calculate answers. 20. Understand that multiplication can be done in any order (commutative) and division cannot. 17. Understand equivalence in simple calculations: 3 x 4 = 6 x □ 21. Solve multiplication/division problems in context, using recall of x /÷ facts, doubling, halving, arrays, 'clever counting'.

10 27. Recognise/use symbols for pounds (£) & pence (p); combine amounts, find diff combinations of coins to give same amount. 28. Solve simple problems in a practical context; add and subtract pence & pounds, incl. finding and giving change.

11 24. Understand ½, ¼, 1/3, ¾, 2/3 as fractions of quantities in a practical context; solve problems using shapes, objects, quantities. 22. Count in halves and quarters, recognising fractions as numbers. 21. Solve multiplication/division problems in context, using recall of x /÷ facts, doubling, halving, arrays, 'clever counting'. 29. Tell/write the time on digital/analogue clocks to ½ past, ¼ past & ¼ to the hour 30. Begin to tell and write the time on digital and analogue clocks to the nearest 5 minutes. |

What does each lesson cover and how does it link together over time? NC aims for Key Stage 2 (Years 3-4):

To **become fluent** in the fundamentals of mathematics; to **reason mathematically** by following a line of enquiry and developing an argument; to **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

1M: number and place value
2M: addition and subtraction
3M: multiplication and division (including scaling or square/cube numbers or multiples and factors)
4M: fractions, decimals, percentages or ratio
5M: measurement and statistics (including lengths and height; mass/weight; capacity and volume; time; money; sequencing events; graphs, charts, pictograms and tables)
6M: geometry- properties of shapes; position and direction

Theme	AUTUMN TERM		
KS2 Yr 3	**1.** 1. Read, write, locate any 3 -digit number on landmarked line from 0 -1000 and use this to order and compare numbers . 2. Estimate quantities & represent numbers in different ways 3. Understand place value in 3 -digit numbers 5. Solve number problems and practical problems involving place value 32. Use both £ and p in practical contexts. **2.** 7. Know securely number pairs for all the numbers up to and including 20, 13. Estimate answers and use addition to check subtraction, understanding that addition and subtraction are inverse operations 14. Solve problems, including missing number problems **3.** 8. Mentally add or subtract any pair of 2 digit numbers, e.g. 75 + 58 or 75 – 58. 13. Estimate answers and use addition to check subtraction, understanding that addition and subtraction are inverse operations. 10. Recognise that there are two ways of completing subtractions, either by counting up or by counting back 32. Give change by counting up; use both £ and p in practical contexts 4 37. Draw 2 -D and make 3 -D shapes, recognising both in different orientations, and describe them.	**5.** 20. Partition to double and halve numbers 17. Know the 2x, 5x, 10x times tables, including division facts 4. Count from 0 in 2s and 10s 15. Understand that multiplication is commutative, and write mathematical statements for multiplication/division 16. Understand that division is the inverse of multiplication, e.g. ? x 3 = 21 ≡ 21 ÷ 3 = ? **6.** 2. Estimate quantities & represent numbers in different way 3. Understand place value in 3 -digit numbers 5. Solve number problems and practical problems involving place value 32. Use both £ and p in practical contexts. **7.** 3. Understand place value in 3 -digit numbers 5. Solve number problems & practical problems involving place value 9. Mentally add and subtract multiples of 1s, 10s and 100s to/from 3 -digit numbers. **8.** 7. Know securely number pairs for all the numbers up to and including 20, e.g. pairs to 10 8. Mentally add or subtract any pair of 2 digit numbers, including pairs to 100 12. Subtract larger numbers with confidence, using 'Frog' for counting up, e.g. either side of 100	**9.** 33. Tell and write the time on digital and analogue clocks (incl. those with Roman numerals). 34. Record times in seconds, minutes, hours, days, weeks, months, years including leap years, converting from one unit to another. 35. Compare durations of events using analogue/digital times & vocabulary such as am and pm. 36. Interpret and represent data on scaled bar charts, pictograms and tables, and solve problems using these. **10.** 17. Know the 2x, 3x, 4x, 5x and 10x times tables, including division facts. 15. Understand that multiplication is commutative, and write mathematical statements for multiplication and division 16. Understand that division is the inverse of multiplication. **11.** 20. Partition to halve numbers. 23. Recognise, find and write unit and non -unit fractions of convenient amounts, e.g. 1/10 of 100 or 1/3 of 60. 27. Solve problems involving fractions	
Yr 4	1.1. Read, write and locate any 3 -digit number on a landmarked line from 0 -1000 and use this to locate 4 -digit numbers on a landmarked line and use this to compare/order numbers. 3. Understand the numbers of 1s, 10s, 100s, 1000s in a 4 -d no, and the use of zero as a place holder 9. Solve number and practical problems involving place value 2,10.Mentally add and subtract any pair of two digit numbers or 3 -digit multiples of 10 12. Subtract numbers from 3 -digit numbers using 'Frog' or counting up, e.g. 321 – 87 3, 11.Use column addition to add 3 -digit numbers: first expanded method, then compact method 12. Subtract numbers from 3 -digit numbers using 'Frog' or counting up, e.g. 426 – 278, 321 – 87 15. Estimate and use inverse operations to check answers to a calculation. 4. 39.Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. 41. Identify lines of symmetry in 2 -D shapes presented in different orientations; complete a simple symmetric figure with respect to one line of symmetry	**5.** 21. Solve single -step problems including doubling and halving; begin to solve multi -step problems, including multiplication or division 17. Know and recite times tables, including division facts, for 2x, 3x, 4x, 5x, 6x, 8x, 10x up to 12x; multiply by 0 and multiply and divide by 1. 18. Use known facts, place value, factors and commutativity to multiply and divide mentally, including multiplying three numbers together. **6.** 3. Understand the numbers of 1s, 10s, 100s, 1000s in a 4 - digit number and the use of zero as a place holder. 6. Add multiples of 1, 10, 100, 1000 without difficulty. 9. Solve number and practical problems involving place value. 7. 6. Add multiples of 1, 10, 100, 1000 without difficulty. 9. Solve number and practical problems involving place value. 16. Solve addition and subtraction two -step problems in contexts, deciding which operations to use and why. 32. Solve simple money problems involving decimals to two decimal places. 36. Estimate, compare and calculate different measures, including money in pounds and pence	8, 3. Understand the nos of 1s, 10s, 100s in a 3 -digit number and the use of zero as a place holder 14. Use column subtraction to subtract 3 -digit numbers: first expanded method and then compact method 12. Subtract numbers from 3 -digit numbers using 'Frog' or counting up, e.g. 426 – 278, 321 – 87 15. Estimate and use inverse operations to check answers to a calculation 9. 33. Convert between units of measurement, e.g. between different units of time 36. Estimate, compare and calculate different measures, including time in hours, minutes and seconds 37. Convert between units of time, analogue and digital times, and between 12 -hour and 24 -hour times. 38. Interpret and present discreet data using bar charts and pictograms; ask and answer questions about the data **10.** 19. Multiply 1 -digit numbers by 2 -digit or 'friendly' 3 -digit numbers mentally or using grid method (i.e. using the distributive law). 20. Know how to use 'efficient chunking' for division above the range of the tables facts, e.g. 84 ÷ 6 = ? Begin to extend this to 3 digit numbers	

Theme	SPRING TERM		
KS2 Yr 3	**1** 1. Read, write, locate any 3-digit number on landmarked line from 0-1000 and use this to order and compare nos. 2. Estimate quantities & represent numbers in different way 3. Understand place value in 3-digit numbers 5. Solve number problems and practical problems involving place value **2** 8. Mentally add or subtract any pair of 2 digit numbers, e.g. 75 + 58 or 75 – 58. 9. Mentally add and subtract multiples and near multiples of 10 to/from 2-digit numbers. 10. Recognise that there are two ways of completing subtractions, either by counting up or by counting back **3** 10. Recognise that there are two ways of completing subtractions, either by counting up or by counting back 11. Add numbers with 3-digits using column addition, first expanded then compact method 12. Subtract larger numbers with confidence, using 'Frog' for counting up, e.g. 102 – 88. 14. Solve problems, including missing number problems. **4** 28. Measure, compare, add and subtract lengths, and weights. 29. Know that there are 100cm in a metre and that there are 10mm in a centimetre. 30. Use a ruler to measure lines. 36. Interpret and represent data on scaled bar charts and tables; solve problems using these.	**5** 24. Count up and down in fractional steps, e.g. counting in ½s, ¼s or 1/3s; hence recognise fractions as numbers. 23. Recognise, find and write unit and non-unit fractions of convenient amounts, e.g. 1/3 of 60 22. Recognise and show using diagrams, equivalent fractions for ½, ¼, ¾, 1/3, e.g. ¼ ≡ 3/12. 26. Compare and order unit fractions and fractions with the same denominator; add fractions with same denominator **6** 3. Understand place value in 3-digit numbers; add and subtract 1, 10, 100 without difficulty. 5. Solve number problems and practical problems involving place value. 32. Understand and use both £ and p in practical contexts. 15. Understand that multiplication is commutative; write mathematical statements for multiplication and division 18. Multiply 2-d nos by 10 or 1-d nos by 100; divide multiples of 10 or 100 by 10 or 100. Understand the effect. 16. Understand that division is the inverse of multiplication, e.g. ? x 3 = 21 ≡ 21 ÷ 3 = ? . 21. Solve problems, including missing number problems. **7** 3. Understand place value in 3-digit numbers; add/subtract 1, 10, 100 without difficulty. 5. Solve number problems and practical problems involving place value. 9. Mentally add and subtract multiples of 1s, 10s and 100s to/from 3-digit numbers. 14. Solve problems, including missing number problems. **8** 11. Add numbers with 3-digits using column addition, first expanded then compact method 12. Subtract larger numbers with confidence, using 'Frog' for counting up, e.g. 302 – 288. 13. Estimate answers and use addition to check subtraction, understanding that addition and subtraction are inverse operations. 14. Solve problems, including missing number problems.	**9** 33. Tell and write the time on digital and analogue clocks (incl. those with Roman numerals). 34. Record times in minutes and hours. 35. Compare durations of events using analogue/digital times & vocabulary such as am and pm. 38. Identify right angles as 90⁰ in shapes, and also as turns; recognise angles as less than or greater than 90⁰. **10** 17. Know the 2x, 3x, 4x, 5x and 8x times tables, including division facts. 15. Understand that multiplication is commutative, and write mathematical statements for multiplication and division 16. Understand that division is the inverse of multiplication. **11** 20. Partition to double and halve numbers. 23. Recognise, find and write unit and non-unit fractions of convenient amounts, e.g. 1/10 of 100 or 1/3 of 60. 27. Solve problems involving fractions	
Yr 4	**1** 26. Know that one-place decimal numbers represent ones and tenths 27. Round decimals with one decimal place to the nearest whole number. 29. Find the effect of dividing a one- or two-digit number by 10, identifying the value of the digits in the answer as ones and tenths. 31. Compare numbers with one decimal place 33. Convert between units of measurement, e.g. cm to m. **2** 11. Use column addition to add 3-digit & 4-digit nos: first expanded, then compact method. 15. Estimate and use inverse operations to check answers to a calculation. 12. Subtract numbers from 3-digit numbers using 'Frog'/counting up, e.g. 426–278, 321-87. 32. Solve simple money calculations and problems involving decimals. 36. Estimate, compare and calculate different measures, including money in pounds and pence **3** 11. Use column addition to add 3-digit numbers: first expanded method, then compact method 12. Subtract numbers from 3-digit numbers using 'Frog' or counting up, e.g. 426 – 278, 321 – 87 14. Use column subtraction to subtract 3-digit numbers: first expanded, then compact 15. Estimate and use inverse operations to check answers to a calculation. 32. Solve simple measure/money problems involving fractions and decimals to two decimal places. 36. Estimate, compare and calculate different measures, including money in pounds and pence **4** 33. Convert between units of measurement, e.g. cm to m, g to Kg. 36. Estimate, compare and calculate different measures, including money in pounds and pence 38. Interpret and present discreet data using bar charts, pictograms and tables, and continuous data on time graphs; answer questions re-data.	**5** 23. Write the equivalent fraction for fractions with given denominators or numerators, e.g. ½ = ?/8; reduce a fraction to its simplest form, e.g. 6/12 ≡ ½. 25. Add and subtract fractions with the same denominator. **6** 7. Multiply 1 and 2 digit whole numbers by 10 and100. 29. 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. 9. Solve number and practical problems involving place value. 30. Count up and down in hundredths. 5. Recognise negative numbers in relation to number lines and temperature. **7** 6. Add multiples of 1, 10, 100, 1000 without difficulty. 9. Solve number and practical problems involving place value. 15. Estimate and use inverse operations to check answers to a calculation. 16. Solve addition and subtraction one-step problems, deciding which operations and methods to use and why. **8** 11. Use column addition to add 3-digit & 4-digit nos: first expanded, then compact method. 14. Use column subtraction to subtract 3-digit & 4-digit numbers: first expanded, then compact method. 15. Estimate and use inverse operations to check answers to a calculation.	**9** 33. Convert between units of measurement, e.g. units of time. 37. Convert between units of time, analogue/digital times, and between 12-hour and 24-hour times. 42. Describe positions on 2-D grid as coordinates in 1st quadrant; plot specified points and draw sides to complete a given polygon 43. Describe movements between positions as translations of a given unit to left/right, up/down. **10** 17. Know and recite times tables, including division facts, up to 12 × 12; multiply by 0 and multiply and divide by 1. 18. Use known facts, place value, factors and commutativity to multiply and divide mentally, including multiplying three numbers together. **11** 19. Multiply 1-digit numbers by 2-digit or 'friendly' 3-digit numbers mentally or using grid method (i.e. using the distributive law). 17. Know and recite times tables, including division facts, up to 12 × 12; multiply by 0 and multiply and divide by 1. 20. Know how to use 'efficient chunking' for division above the range of the tables facts, e.g. 84 ÷ 6 = ? Begin to extend this to 3 digit numbers	

Theme	SUMMER TERM : INCREDIBLE INDIA		
KS2 Yr 3	**1** 3. Understand place value in 3-digit numbers. 1. Read, write, locate any 3-digit number on landmarked line from 0-1000 and use this to order and compare nos. 2. Estimate quantities & represent nos in different ways. 5. Solve number problems and practical problems involving place value. 6. Round to the nearest ten and hundred, e.g. 34 to the nearest ten is 30, 276 to the nearest hundred is 300. 4. Count from 0 in 4s, 8s,100s, and 50s. **2** 11. Add numbers with 3-digits using column addition, first expanded then compact method. 12. Subtract larger numbers with confidence, using 'Frog' for counting up, e.g. 302 – 288. 13. Estimate answers and use addition to check subtraction, understanding that addition and subtraction are inverse operations. 14. Solve problems, including missing number problems. **3** 11. Add numbers with 3-digits using column addition, first expanded then compact method. 13. Estimate answers. 14. Solve problems, including missing number problems. 32. Subtract amounts of money and give change by counting up; use both £ and p in practical contexts. **4** 28. Measure, compare, add and subtract lengths and capacities. 30. Use a ruler to measure lines. 36. Interpret and represent data on scaled bar charts and tables, and solve problems. 31. Measure the perimeter of simple 2-D shapes. 32. Subtract amounts of money and give change by counting up; use both £ and p in practical contexts.	**5** 20. Partition to double and halve numbers. 17. Know the 2x, 3x, 4x, 5x and 8x times tables, including division facts. 15. Understand that multiplication is commutative, & write mathematical statements for multiplication & division. 16. Understand that division is the inverse of multiplication. 19. Multiply a 1-digit number by a 2-digit number using partitioning. 21. Solve problems, including missing number problems. **6** 3. Understand place value in 3-digit numbers. 11. Add numbers with 3-digits using column addition, first expanded then compact method. 13. Estimate answers and use addition to check subtraction, understanding that addition and subtraction are inverse operations. 32. Add amounts of money; use both £ and p in practical contexts. **7** 20. Partition to double and halve numbers. 21. Solve problems, incl missing number and scaling problems. 16. Understand that division is the inverse of multiplication, e.g. ? x 3 = 21 ≡ 21 ÷ 3 = ? **8** 38. Identify right angles as 90⁰ in shapes, and also as turns;recognise angles as less than or greater than 90⁰. 39. Identify horizontal and vertical lines, and pairs of parallel and perpendicular lines. 37. Make 3-D shapes, recognising them in different orientations, and describe them.	**9** 25. Count up & down in 1/10s and understand that 1/10s are the result of dividing an object/quantity into 10 equal parts. 23. Recognise, find and write unit and non-unit fractions of convenient amounts, e.g. 1/10 of 100 or 1/3 of 60. 24. Count up and down in fractional steps, e.g. counting in ½s, ¼s or 1/3s; hence recognise fractions as numbers. 27. Solve problems involving fractions. 22. Recognise and show using diagrams, equivalent fractions for ½, ¼, ¾, 1/3, e.g. ¼ ≡ 3/12. 26. Add or subtract fractions with the same denominator. **10** 33. Tell and write the time on digital and analogue clocks (incl. those with Roman numerals). 34. Record times in seconds, mins, hours, days, weeks, months, years including leap years, converting from one unit to another. 35. Compare durations of events using analogue/ digital times & vocabulary such as am and pm 32. Add and subtract amounts of money and give change by counting up; use both £ and p in practical contexts. **11** 9. Mentally add and subtract multiples of 1s, 10s and 100s to/from 3-digit numbers. 19. Multiply a 1-digit number by a 2-digit number using partitioning. 16. Understand that division is the inverse of multiplication, e.g. ? x 3 = 21 ≡ 21 ÷ 3 = ? 21. Solve problems, incl missing number and scaling problems.
Yr 4	**1** 3. Understand the numbers of 1s, 10s, 100s, 1000s in a 4-digit number and the use of zero as a place holder. 6. Add multiples of 1, 10, 100, 1000 without difficulty, e.g. 5,347 + 3000, 434 + 300 and 648 – 220. 1. Locate 4-digit numbers on a landmarked line and use this to compare and order numbers. 2. Round to ten, a hundred and a thousand. 4. Count in multiples of 25 and 1000. 8. Read Roman numerals to 100 (I to C). 9. Solve number and practical problems involving place value. **2** 14. Use column subtraction to subtract 3-digit and 4-digit numbers: first expanded, then compact method. 12. Subtract numbers from 3-digit numbers using 'Frog'/counting up, e.g. 426–278, 321-87. 13. Use 'Frog' to subtract from multiples of 1000 where the difference is less than 500. 15. Estimate and use inverse operations to check answers to a calculation. **3** 14. Use column subtraction to subtract 3-digit and 4-digit numbers: first expanded, then compact method. 11. Use column addition to add 4-digit numbers: first expanded method, then compact method 12. Subtract numbers from 3-digit numbers using 'Frog'/counting up, e.g. 426–278, 321-87. 16. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. **4** 35. Find the area of rectilinear shapes by counting squares. 34. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. 42. Describe positions on a 2-D grid as coordinates in the first quadrant, plot specified points and draw sides to complete a given polygon.	**5** 26. Know that one-place decimal numbers represent ones and tenths e.g. 3.7 = 3 ones and 7 tenths. 27. Round decimals with one decimal place to the nearest whole number. 29. 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. 28. Recognise and write decimal equivalents of any number of tenths or hundredths and decimal equivalents to ¼, ½, ¾. **6** 31. Compare numbers with the same number of decimal places up to two decimal places. 30. Count up and down in hundredths. 32. Solve simple measure and money problems involving fractions and decimals to two decimal places. **7** 18. Use known facts, place value, factors and commutativity to multiply and divide mentally, including multiplying three numbers together. 33. Convert between units of measurement, e.g. cm to m. 22. Solve scaling problems and harder correspondence problems such as n objects are connected to m objects. 20. Know how to use 'efficient chunking' for division above the range of the tables facts, e.g. 84 ÷ 6 = ? Begin to extend this to 3 digit numbers. **8** 41. Identify lines of symmetry in 2-D shapes presented in different orientations; complete a simple symmetric figure with respect to one line of symmetry. 40. Identify acute and obtuse angles, compare and order angles up to 180⁰. 39. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	**9** 18. Use known facts, place value, factors and commutativity to multiply and divide mentally, including multiplying three numbers together. 23. Write the equivalent fraction for fractions with given denominators or numerators, e.g. ½ = ?/8. 24. Use times tables to find unit and non-unit fractions of amounts, e.g. 1/6 of 48 and 3/8 of 64. **10** 37. Convert between units of time and between analogue and digital times, and between 12-hour and 24-hour times. 38.Interpret and present continuous data on time graphs; answer questions re-data. **11** 19. Multiply 1-digit numbers by 2-digit or 'friendly' 3-digit numbers. 21. Solve single-step problems and begin to solve multi-step problems which include multiplication or division. 16. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

How does all this build on their learning from the Early Years?

Early Learning Goal		Number and Place Value	• To count reliably with numbers from one to 20. • To say which number is one more or one less than a given number from one to 20 • To place numbers one to 20 in order
	Mathematics	Addition and subtraction	• To add and subtract two single- digit numbers and count on and back to find the answer using quantities and objects. • To solve problems including doubling, halving and sharing.
		Shape, space and measure	• To use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and solve problems. • To explore characteristics of everyday objects and shapes and use mathematical language to describe them. • To recognise, create and describe patterns.

What do they go on to learn about in Year 5 and 6?

Year 5:
Number and place value to at least 1,000,000; interpreting negative numbers; rounding and solving problems; reading Roman numerals up to 1000 (M)
Addition and subtraction of 4 digit numbers, including formal written methods and mental maths: rounding to check answers; multi-step problems in context
Multiplication and division: multiples and factors; prime numbers, factors and composite numbers; long multiplication for 4-digit numbers; division and remainders; decimals
Fractions: compare and order; equivalent fractions; recognise mixed numbers and improper fractions and convert; add and subtract fractions with same denominator; multiply proper fractions; decimals; use thousandths; round decimals, read, write, order and compare; solve problems; percentages and decimal equivalents.
Measurement: convert between different units of metric measurement; use approximate equivalences between metric/imperial; perimeter; area; volume; solve problems.
Geometry: representations; angles - acute, obtuse and reflex; measure in degrees; find missing lengths and angles; polygons; reflection or translation;
Statistics: solve comparison, sum and difference problems; interpret information in tables

Year 6:
Number and place value to 10,000,000; rounding; use negative numbers in context and across zero; solve number and practical problems.
Addition, subtraction, multiplication and division: multiply multi-digit numbers up to 4 digits using formal long multiplication; divide numbers up to 4 digits using formal long division, with remainders, fractions or rounding and short division where appropriate; mental calculations including mixed operations and large numbers; common factors, multiples and prime numbers, carry out calculations; solve multi-step problems; use estimation to check answers.
Fractions: use factors to simplify fractions; use multiples to express fractions in same denomination; compare and order; and and subtract with different denominators and mixed numbers; multiply/divide proper fractions; calculate decimal fraction equivalents; identify value of each digit to 3 decimal places; multiply numbers with up to 2 decimal places; use written division; solve problems; recall and use equivalences between simple fractions, decimals and percentages.
Ratio and proportion: solve problems involving the following: relative size and missing values; calculating percentages; similar shapes and scale factor; unequal sharing and grouping.
Algebra: use simple formulae; generate linear number sequences; express missing number problems algebraically; equations with 2 unknowns; possibilities of combinations of 2 variables
Measurement: solve problems involving calculation and conversion of units of measure using decimal notation; convert standard units (length, mass, volume and time) from smaller to larger unit; convert between miles and kilometres; recognise shapes with different perimeters; use formulae for area and volumes of shapes; calculate the area of parallelograms and triangles; calculate, estimate and compare volume of cubes and cuboids including cubic units.
Geometry: draw 2-D shapes using given dimensions and angles; build simple 3-D shapes and make nets; compare and classify geometric shapes and find unknown angles; illustrate and name parts of circles (radius, diameter, circumference); recognise and find missing angles; describe positions on the full coordinate grid (4 quadrants); draw and translate simple shapes on the coordinate plane and reflect in the axes.
Statistics: interpret and construct pie charts, line graphs and use to solve problems; calculate and interpret mean as an average.

Examples of how these units are linked to the National Curriculum
Key Stage 2: Year A: Autumn term:
Note: Individual breakdowns are available for each key stage, and for each term. There are too many to include in this document, but printed copies will be available on request. The coverage grids are for: Number and place value; Addition and subtraction; Multiplication and division; Number, fraction and decimals; Measurement; Properties of shape, position and direction; and Statistics.

Each term focuses on different aspects of the Mathematics curriculum in order that pupils receive the full coverage. The example here shows 1 of the available breakdown grids, and is for the Autumn term in Owls class.

Please ask the class teacher, or office manager, for full printed copies.

Coverage of National Curriculum Maths Year 3/Year 4

Number: *Pink = Taught and well covered, Yellow = In teaching and covered a bit, Blue = mentioned and covered in activities but not in teaching*

Nat Curriculum Objective	YEAR 3 Number: Number and Place Value						YEAR 4 Number: Number and Place Value								
	Count from 0 in multiples of 4, 8, 50 and 100; 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)	Compare and order numbers up to 1000	Identify, represent and estimate numbers using different representations	Read and write numbers up to 1000 in numerals and in words	Solve number problems and practical problems involving these ideas	Count in multiples of 6, 7, 9, 25 and 1000	Find 1000 more or less than a given number	Count backward through zero to include negative numbers	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Order and compare numbers beyond 1000	Identify, represent and estimate numbers using different representations	Round any number to the nearest 10, 100 and 1000	Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
Autumn															
AUTUMN Week 1		Day 3	Day 3	Day 2	Days 1-3 numerals	Day 3				Days 1-3	Days 3 and 5	Days 1-5		Day 1	
AUTUMN Week 6	Days 4 & 5 +/- 1, 10, 100	Days 1 & 2 PV + and -						Day 3		Days 1-5		Days 3, 4, 5		Day 2	
AUTUMN Week 10	Day 2 Count in 4s														
Spring															
SPRING Week 1		Days 3 & 5	Days 3 & 4	Days 1, 2 & 4	Days 1-5 numerals	Day 5									
SPRING Week 6		Days 2-4 ×/÷ 10,100							Days 4,5						
SPRING Week 7										Days 3-5 +/- 10s, 100s, 1000s					