



Mathematics Arithmetic Overview

Flourishing Together

At Quinton Church Primary School, we believe that to **Flourish** is to become the best version of ourselves in body, mind and spirit (John 10:10). It means being loved and recognised for who we are, uniquely made in the image of God (Psalm 139:13-14).

Together emphasises the strength, possibilities and encouragement that can be found in community, teamwork and family (Psalm 133:1). It highlights how everyone has a part to play and brings value and worth to our collective endeavours. Togetherness shines a light on our desire to be a community that is inclusive of everyone, whatever the challenges, so that all can flourish (1 John 4:19).

At Quinton, our culture is to: **Be kind, be fair and be thankful** (Micah 6:8). This overarching culture of kindness, fairness and thankfulness are further explored through our six values of **Belonging, Love, Justice, Forgiveness, Peace and Hope**.

Our curriculum is driven by our Christian Vision, Culture and values, and the diversity of our local, national and global community.

Flourishing Together

Rationale

Arithmetic lessons will take place daily and will last for around 10-15 minutes. They will focus on and ensure pupils have a strong arithmetic knowledge that they can use and apply across the maths curriculum. There are five maths lessons per week so therefore there will be five arithmetic lessons. Three of the five lessons will focus on teachers delivering objectives that are required for the end of term assessment. These objectives will not be provided in any order, this is for teachers to use their professional judgement and teach them in the best possible order. For example, an objective could be taught in one week as it would support the maths lesson in the following week, or it could be used as a recap and retrieval for something that was taught a few weeks ago. The other two remaining lessons are for teacher to use their assessment for learning to identify gaps in learning, areas of study that pupils have found challenging, pre-tutor or times tables. Teachers will have the flexibility in these lessons to deliver what their pupils need. An arithmetic test should be completed and evidenced fortnightly and used to inform arithmetic lessons.

In KS1 will also complete 5 arithmetic lessons which consist of the NCETM Mastering number content which focuses on retrieval of number facts, develop good number sense and have automatic additive facts. During Term 2 and 3 Year 2 will also be practising SATS style arithmetic questions during one of their arithmetic lessons.

It is expected that these lessons will be live marked and scaffolded to meet the needs of all pupils.

Flourishing Together

Year 1		
Autumn	Spring	Summer
<ul style="list-style-type: none"> • subitise within 5, including when using a rekenrek, and re-cap the composition of 5 • develop their understanding of the numbers 6 to 9 using the '5 and a bit' structure • compare numbers within 10 and use precise mathematical language when doing so • re-cap the order of numbers within 10 and connect this to '1 more' and '1 less' than a given number • explore the structure of even numbers (including that even numbers can be composed by doubling any number, and can be composed of 2s) • explore the structure of the odd numbers as being composed of 2s and 1 more • explore the composition of each of the numbers 6, 8, and 10 explore number tracks and number lines and identify the differences between them 	<ul style="list-style-type: none"> • explore the composition of each of the numbers 7 and 9 • explore the composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part • identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number • explore the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes • explore the augmentation and reduction structures of addition and reduction using number stories, including introducing the 'first, then, now' language structure. 	<ul style="list-style-type: none"> • explore the composition of the numbers 11 to 19 as '10 and a bit' and compare numbers within 20 • connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15 • compare numbers within 20 • understand how addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction) • practise retrieving previously taught facts and reason about these

NCETM Mastering Number

Previous Year Groups Objectives

Flourishing Together

Year 2

Autumn	Spring	Summer
<ul style="list-style-type: none"> • review the composition of the numbers 6 to 9 as '5 and a bit' • compare numbers using the language of comparison and use the symbols $<$ $>$ $=$ • review the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6, 8 and 10 • review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9 consolidate their understanding of the numbers 10 and 20 as '10 and a bit' • consolidate their understanding of the linear number system to 20 and reason about midpoints 	<ul style="list-style-type: none"> • Counting forwards and backwards within 20. • Add and subtract one-digit and two-digit numbers to 20, including zero • Given a number, identify one more and one less • Number bonds to 10 • Number bonds to 20 • Add by making 10 • Subtracting crossing 10 • Counting forwards and backwards within 50 • Compare numbers within 50 • Count forwards and backwards to 100. • Count in 2's , 3's, 5's and 10's. • Number bonds to 100 • Calculations with similar digits (2+5=7 so, 20+50=70) • Add and subtract one from a one-digit and two-digit number. • 10 more and 10 less than a one-digit and two-digit number. • Add two-digit and one-digit numbers. • Subtract one-digit from two-digit numbers • Add two-digit numbers • Subtract two-digit numbers • Add 3 one-digit numbers • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • Missing number questions • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems • Finding a unit fractions ,half, quarter and third, of an amount up to 100. • Finding a non-unit fractions ,three quarters and 2 third, of an amount up to 100. 	<ul style="list-style-type: none"> • Counting forwards and backwards within 20. • Add and subtract one-digit and two-digit numbers to 20, including zero • Given a number, identify one more and one less • Number bonds to 10 • Number bonds to 20 • Add by making 10 • Subtracting crossing 10 • Counting forwards and backwards within 50 • Compare numbers within 50 • Count forwards and backwards to 100. • Count in 2's , 3's, 5's and 10's. • Number bonds to 100 • Calculations with similar digits (2+5=7 so, 20+50=70) • Add and subtract one from a one-digit and two-digit number. • 10 more and 10 less than a one-digit and two-digit number. • Add two-digit and one-digit numbers. • Subtract one-digit from two-digit numbers • Add two-digit numbers • Add multiples of 10 together • Subtract two-digit numbers • Add 3 one-digit numbers • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • Missing number questions • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems • Finding a unit fractions ,half, quarter and third, of an amount up to 100. • Finding a non-unit fractions ,three quarters and 2 third, of an amount up to 100.

Flourishing Together

	<ul style="list-style-type: none">• explore how the numbers 6 to 9 can be doubled using the '5 and a bit' and '10 and a bit' structure• use doubles to calculate near doubles• use bonds of 10 to reason about bonds of 20, in which the given addend is greater than 10• use known number bonds within 10 to calculate within 20, working within the 10-boundary• use their knowledge of bonds of 10 to find three addends that sum to 10• use their knowledge of the composition of numbers within 20 to add and subtract across the 10-boundary• use their understanding of the linear number system to 10 to position multiples of 10 on a 0 - 100 number line and reason about midpoints	<ul style="list-style-type: none">• continue to explore a range of strategies to subtract across the 10-boundary• review bonds of 20 in which the given addend is greater than 10, and reason about bonds of 20, in which the given addend is less than 10• practise previously explored strategies to support their reasoning about inequalities and equations• review doubles and near doubles and transform additions in which two addends are adjacent odd/ even numbers into doubles• consolidate previously taught facts and strategies through continued, varied practice
--	---	--

NCETM Mastering Number
Previous Year Groups Objectives

Flourishing Together

Year 3

Autumn

Spring

Summer

- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
- Counting up and down fractions (adding/subtracting fractions on a number line with the same denominator)
- Finding half, quarter and third of an amount.
- Missing number statements with addition and subtraction.
- Doubling and halving numbers.
- Read and write numbers up to 1000 in numerals and words.
- Find 10 or 100 more or less than a number than a given number.
- Add and subtract numbers mentally, including a two-digit number and ones, tens and hundreds.
- Add and subtract numbers with two digits, using formal written methods of columnar addition and subtraction.
- Add and subtract numbers mentally, including a three-digit number and ones, tens and hundreds.
- Add and subtract numbers with three digits, using formal written methods of columnar addition and subtraction.
- Count from 0 in multiples of 4, 8, 50 and 100.
- Recall and use multiplication for the 3, 4 and 8 multiplication tables
- Recall and use division facts for the 3, 4 and 8 multiplication tables
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction – using words for numbers and sums.

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.
- Finding half, quarter and third of an amount.
- Counting up and down fractions (adding/subtracting fractions on a number line with the same denominator)
- Doubling and halving numbers by partitioning and known facts.
- Count from 0 in multiples of 4, 8, 50 and 100
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Count from 0 in steps of 2, 3, 4 forward and backward.
- Find 10 or 100 more or less than a given number.
- Comparing statements using <>=
- Halving numbers by dividing by 2 using partitioning and known facts.
- Multiply two-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication.
- Add and subtract numbers mentally, including a two-digit number and ones, tens and hundreds.
- Add and subtract numbers with two digits, using formal written methods of columnar addition and subtraction.
- Add and subtract numbers mentally, including a three-digit number and ones, tens and hundreds
- Add and subtract numbers with three digits, using formal written methods of columnar addition and subtraction.
- Solving division problems with a remainder.
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
- Recognise and use the inverse relationship between addition and subtraction.

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.
- Counting up and down fractions
- Doubling and halving larger numbers by partitioning and known facts
- Count from 0 in multiples of 4, 8, 50 and 100
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Count from 0 in steps of 2, 3, 4 forward and backward.
- Comparing statements using <>=
- Find 10 or 100 more or less than a given number.
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
- Add and subtract numbers mentally, including a two-digit number and ones, tens and hundreds.
- Add and subtract numbers mentally, including a three-digit number and ones, tens and hundreds
- Multiply two-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication.
- Add and subtract fractions with the same denominator within one whole.
- Compare unit/ non-unit fractions with the same denominator
- Find unit fractions of an amount – 1/2, 1/3, 1/4, 1/5 ect.
- Find non-unit fractions of an amount – 2/3, 2/4, 3/4, 2/4 ect.
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
- Recognise and use the inverse relationship between addition and subtraction.

NCETM Mastering Number

Previous Year Groups Objectives

Flourishing Together

Year 4

Autumn	Spring	Summer
<ul style="list-style-type: none"> • Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • Count from 0 in steps of 2, 3, 4 forward and backward. • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • Add and subtract numbers mentally, including up to a three-digit number and ones, tens and hundreds • Multiply two-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Add and subtract fractions with the same denominator within one whole. Adding 3 fractions together. • Recall and use multiplication and division facts for the 3, 6, 7, 9, 11 and 12 multiplication table. • Count in multiples of 6,7,9,25 and 1000. • Find 10,100 ,1000 more or less than a given number • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction. • Compare numbers using \leq beyond 1000. • Multiply 3 numbers together • Multiply and divide a number by 0 and 1. • Multiply three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Count backwards to 0 to include negative numbers. • Round a given number to the nearest 10,100 and 1000. • Read roman numerals to 100. • Recognise and use the inverse relationship between addition and subtraction and multiplication and division to check answers. • Solve problems, including missing number problems, using number facts and place value. 	<ul style="list-style-type: none"> • Multiply two-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Count in multiples of 4,8,50 and 100. • Add and subtract fractions with the same denominator within one whole. Adding 3 fractions together. • Recall multiplication and division facts for multiplication tables up to 12×12 • Doubling and halving larger numbers by partitioning and dividing and multiplying by 2. • Count in multiples of 6,7,9,25 and 1000. • Find 10,100 ,1000 more or less than a given number • Compare numbers using \leq beyond 1000. • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction. • Add and subtract numbers mentally, including up to a four-digit number and ones, tens and hundreds. • Add and subtract whole numbers by decimals. • Multiply 3 numbers together • Multiply and divide a number by 0 and 1. • Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Round a given number to the nearest 10,100 and 1000. • Count backwards to 0 to include negative numbers. • Read roman numerals to 100. • Find unit/ non unit fractions of an amount. • Round a decimal to the nearest whole number. • Compare \leq numbers up to 2 d.p • Count up and down in tenths and hundredths • Dividing a one- or two-digit number by 10 and 100 • Find decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{10}$, $\frac{1}{100}$. • Solve problems, including missing number problems, using number facts and place value. 	<ul style="list-style-type: none"> • Multiply two-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Count in multiples of 4,8,50 and 100. • Add and subtract fractions with the same denominator within one whole. Adding 3 fractions together • Doubling and halving larger numbers by partitioning and known facts • Recall multiplication and division facts for multiplication tables up to 12×12 • Count in multiples of 6,7,9,25 and 1000. • Find 10,100 ,1000 more or less than a given number • Compare numbers using \leq beyond 1000. • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction. • Add and subtract whole numbers by decimals. • Add and subtract numbers mentally, including up to a four-digit number and ones, tens and hundreds. • Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1. • Multiplying together three numbers • Recognise factor pairs and commutativity • Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Round a given number to the nearest 10,100 and 1000. • Count backwards to 0 to include negative numbers. • Read roman numerals to 100. • Find unit/ non unit fractions of an amount. • Round a decimal to the nearest whole number. • Compare \leq numbers up to 2 d.p • Count up and down in tenths and hundredths • Dividing a one- or two-digit number by 10 and 100 • Find decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{10}$, $\frac{1}{100}$. • Solve problems, including missing number problems, using number facts and place value.

Flourishing Together

Year 5

Autumn	Spring	Summer
<ul style="list-style-type: none"> • Recall multiplication and division facts for multiplication tables up to 12×12 • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction. • Compare numbers using $<=>$ beyond 1000. • Find 10,100 ,1000 more or less than a given number • Count backwards to 0 to include negative numbers. • Round a given number to the nearest 10,100 and 1000. • Round a decimal to the nearest whole number. • Add and subtract fractions with the same denominator within one whole. Adding 3 fractions together • Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1 • Find decimal equivalents of $1/4, 1/2, 3/4, 1/10, 1/100$. • Compare numbers using $<=>$ up to 1,000,000. • Read roman numerals to 100. • Add and subtract numbers mentally with increasingly large numbers • Add and subtract numbers with more than 4 digits using the formal written methods of columnar addition and subtraction. • Multiply and divide whole numbers by 10, 100 and 1000 • Multiply up to four-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1. • Multiplying together three numbers. • Identify prime numbers up to 19. • Identify factors and multiples. • Square and cubed numbers • Count forward and backwards in powers of 10 to 1,000,000. • Finding fractions of an amount • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<ul style="list-style-type: none"> • Recall multiplication and division facts for multiplication tables up to 12×12 • Find 10,100 ,1000 more or less than a given number • Find decimal and fraction equivalents of $1/4, 1/2, 3/4, 1/10, 1/100$. • Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Count backwards to 0 to include negative numbers. • Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1 • Round numbers to the nearest 10,100,1000,10,000 and 100,000. • Add and subtract numbers with more than 4 digits using the formal written methods of columnar addition and subtraction. • Square and cubed numbers • Multiply and divide whole numbers by 10, 100 and 1000 • Count forward and backwards in powers of 10 to 1,000,000. • Multiply up to four-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Multiply up to four-digit by 2-digit numbers by using formal written methods of columnar multiplication. • Multiplying together three numbers • Divide up to four-digit by one-digit numbers with remainders using formal written method. • Identify factors and multiples. • Identify prime numbers up to 19. • Identify composite numbers up to 50. • Compare fractions with the same denominators or denominators with the same multiples. • Find equivalent fractions • Add and subtract fractions with the same and different denominators over the whole. • Find fractions of an amount • Multiply unit/ non-unit and mixed numbers by integers. • Add and subtract fractions with different denominators with the same multiples. • Round decimals to the nearest whole number and 1.dp • Find equivalent fraction, decimals and percentages. • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<ul style="list-style-type: none"> • Recall multiplication and division facts for multiplication tables up to 12×12 • Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1 • Find 10,100 ,1000 more or less than a given number • Count backwards to 0 to include negative numbers. • Round numbers to the nearest 10,100,1000,10,000 and 100,000. • Add and subtract numbers with more than 4 digits using the formal written methods of columnar addition and subtraction. • Multiply up to four-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. • Multiply up to four-digit by 2-digit numbers by using formal written methods of columnar multiplication. • Divide up to four-digit by one-digit numbers with remainders using formal written method of short division. • Square and cubed numbers • Identify factors and multiples. • Identify prime numbers up to 19. • Identify composite numbers up to 50. • Compare fractions with the same denominators or denominators with the same multiples. • Find equivalent fractions • Add and subtract fractions with different denominators with the same multiples. • Find equivalent fraction, decimals and percentages. • Add and subtract fractions with the same and different denominators over the whole. • Find fractions of an amount • Multiply unit/ non-unit and mixed numbers by integers • Multiply proper fractions and mixed numbers by whole numbers • Round decimals to the nearest whole number and 1.dp • Adding and subtracting decimals with the same number of decimal places • Adding and subtracting decimals with a different number of decimal places • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

NCETM Mastering Number

Previous Year Groups Objectives

Flourishing Together

Year 6

Autumn	Spring	Summer
<ul style="list-style-type: none"> Recall multiplication and division facts for multiplication tables up to 12×12 Round numbers to the nearest 10,100,1000,10,000 and 100,000. Count backwards to 0 to include negative numbers. Find 10,100 ,1000 more or less than a given number Add and subtract numbers with more than 4 digits using the formal written methods of columnar addition and subtraction. Count forward and backwards in powers of 10 to 1,000,000. Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1. Multiply and divide whole numbers and decimals by 10, 100 and 1000 Multiply up to four-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. Multiply up to four-digit by 2-digit numbers by using formal written methods of columnar multiplication. Divide up to four-digit by one-digit numbers with remainders using formal written method. Find equivalent fractions Find fractions of an amount Add and subtract fractions with different denominators with the same multiples. Add and subtract fractions with the same and different denominators over the whole. Multiply unit/ non-unit and mixed numbers by integers Find equivalent fraction, decimals and percentages. Round decimals to the nearest whole number and 1.dp Adding and subtracting decimals with the same number of decimal places Adding and subtracting decimals with a different number of decimal places Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Count forward and backwards with positive and negative numbers through 0. Compare numbers \leq up to 1,000,000. Divide up to four-digit by 2-digit numbers using formal written method of long division. Add and subtract mixed numbers and improper fractions with the same and different denominators crossing the whole and over a whole. Multiply proper fractions and mixed numbers by whole numbers Multiply fractions. Divide fractions by whole numbers. 	<ul style="list-style-type: none"> Recall multiplication and division facts for multiplication tables up to 12×12 Round numbers to the nearest 10,100,1000,10,000 and 100,000. Count backwards to 0 to include negative numbers. Find 10,100 ,1000 more or less than a given number Add and subtract numbers with more than 4 digits using the formal written methods of columnar addition and subtraction. Count forward and backwards in powers of 10 to 1,000,000. Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1. Multiply and divide whole numbers and decimals by 10, 100 and 1000 Multiply up to four-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. Multiply up to four-digit by 2-digit numbers by using formal written methods of columnar multiplication. Divide up to four-digit by one-digit numbers with remainders using formal written method. Find equivalent fractions Find fractions of an amount Add and subtract fractions with different denominators with the same multiples. Add and subtract fractions with the same and different denominators over the whole. Multiply unit/ non-unit and mixed numbers by integers Find equivalent fraction, decimals and percentages. Round decimals to the nearest whole number and 1.dp Adding and subtracting decimals with the same number of decimal places Adding and subtracting decimals with a different number of decimal places Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Count forward and backwards with positive and negative numbers through 0. Compare numbers \leq up to 1,000,000. Divide up to four-digit by 2-digit numbers using formal written method of long division. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. Add and subtract mixed numbers and improper fractions with the same and different denominators crossing the whole and over a whole. Multiply proper fractions and mixed numbers by whole numbers 	<ul style="list-style-type: none"> Recall multiplication and division facts for multiplication tables up to 12×12 Round numbers to the nearest 10,100,1000,10,000 and 100,000. Count backwards to 0 to include negative numbers. Find 10,100 ,1000 more or less than a given number Add and subtract numbers with more than 4 digits using the formal written methods of columnar addition and subtraction. Count forward and backwards in powers of 10 to 1,000,000. Multiply up to three-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication Multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1. Multiply and divide whole numbers and decimals by 10, 100 and 1000 Multiply up to four-digit by one-digit numbers by using known facts, partitioning and written methods of columnar multiplication. Multiply up to four-digit by 2-digit numbers by using formal written methods of columnar multiplication. Divide up to four-digit by one-digit numbers with remainders using formal written method. Find equivalent fractions Find fractions of an amount Add and subtract fractions with different denominators with the same multiples. Add and subtract fractions with the same and different denominators over the whole. Multiply unit/ non-unit and mixed numbers by integers Find equivalent fraction, decimals and percentages. Round decimals to the nearest whole number and 1.dp Adding and subtracting decimals with the same number of decimal places Adding and subtracting decimals with a different number of decimal places Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Count forward and backwards with positive and negative numbers through 0. Compare numbers \leq up to 1,000,000. Divide up to four-digit by 2-digit numbers using formal written method of long division. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. Add and subtract mixed numbers and improper fractions with the same and different denominators crossing the whole and over a whole. Multiply proper fractions and mixed numbers by whole numbers

Flourishing Together

	<ul style="list-style-type: none">• Multiply fractions• Divide fractions by whole numbers.• Find percentages of an amount.• Order of operations (BODMAS)• Multiply decimals by an integer• Divide decimals by an integer• Compare numbers up to 3 d.p	<ul style="list-style-type: none">• Multiply fractions• Divide fractions by whole numbers.• Find percentages of an amount.• Order of operations (BODMAS)• Multiply decimals by an integer• Divide decimals by an integer• Compare numbers up to 3 d.p.
--	---	--

NCETM Mastering Number

Previous Year Groups Objectives