

MATHS PROGRESSION PATHWAY (L7-16)

Maths

Outcomes are not always progressive within a level – teachers use their discretion to know which order to teach in. If unsure, use the Power Maths scheme from level 11 onwards.

Rolling Programme

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus Strand	Number and Place Value	Calculation (AS)	Number and Place Value	Calculation (MD)	Number and Place Value	Calculation (FDP/RP/ALG)
Additional Strand	Geometry		Statistics		Measure	
Recap Focus	Calculation (MD)	Measure	Calculation (FDP/RP/ALG)	Geometry	Calculation (AS)	Statistics

NUMBER AND PLACE VALUE	
EYFS – RANGE 3 (L7)	<ul style="list-style-type: none"> COUNTING: Says some counting words COUNTING: May engage in counting-like behaviour, making sounds and pointing or saying some numbers in sequence COUNTING: Responds to mathematical questions such as 'how many' with a number (not always correctly) CARDINALITY: Uses number words, like one or two and sometimes responds accurately when asked to give one or two things CARDINALITY: Independently completes a variety of 1:1 correspondence activities e.g. putting one pencil in each pot, giving one plate to each child)
EYFS – RANGE 4 (L8)	<ul style="list-style-type: none"> COUNTING: Begins to say numbers in order, some of which are in the right order (ordinality) CARDINALITY: Recognises when there is not enough to complete 1:1 correspondence activities and asks for more. CARDINALITY: In everyday situations, takes or gives two or three objects from a group CARDINALITY: Beginning to notice numerals (number symbols) CARDINALITY: Beginning to count on their fingers.
EYFS – RANGE 5 (L9)	<ul style="list-style-type: none"> COUNTING: May enjoy counting verbally as far as they can go COUNTING: Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. COUNTING: Uses some number names and number language within play, and may show fascination with large numbers COUNTING: Recognises (e.g. finds the numeral said by an adult) numerals 0 to 10 COUNTING: Reads (e.g. says the numeral when shown it) numerals 0-10 CARDINALITY: Subitises one, two and three objects (without counting) CARDINALITY: Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) CARDINALITY: Links numerals with amounts up to 5 and maybe beyond CARDINALITY: Explores using a range of their own marks and signs to which they ascribe mathematical meanings COMPOSITION: Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
EYFS – RANGE 6 (L10)	<ul style="list-style-type: none"> COUNTING: Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0 COUNTING: Increasingly confident at putting numerals in order 0 to 10 (ordinality) COUNTING: Verbally counts to 20 and beyond CARDINALITY: Subitises numbers to five CARDINALITY: Counts out up to 10 objects from a larger group CARDINALITY: Counts up to 10 of something that cannot be manipulated (jumps, claps) CARDINALITY: Matches the numeral with a group of items to show how many there are (up to 10) CARDINALITY: Understands the concept of zero as 'nothing'. COMPOSITION: Writes numbers to 10 in numerals (using conventional and/or unconventional methods) COMPOSITION: Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects COMPOSITION: Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three
ARE 1 (L11)	<ul style="list-style-type: none"> Counts to 20 forwards beginning with 0 or 1 Counts backwards from 20 Reads numbers to 20 Writes numbers to 20 in numerals (using conventional and/or unconventional methods) Orders numbers to 20. Uses the language of: equal to, more than, less than (fewer), most, least Reads numbers from 1 to 20 in numerals. Subitises numbers to ten. Identifies one more when given a number (within 20) Identifies one less when given a number (within 20) Counts to 100 forwards beginning with 0 or 1

	<ul style="list-style-type: none"> ▪ Counts to 100 forwards beginning from any given number ▪ Counts backwards from 100 ▪ Reads and recognises most numbers to 100 ▪ Writes most numbers to 100 in numerals (using conventional and/or unconventional methods) ▪ Counts in multiples of twos, from 0 to 20. ▪ Counts in multiples of fives, from 0 to 50. ▪ Identifies and represents numbers using objects (up to 20) ▪ Counts across 100 ▪ Counts in multiples of tens, from 0 to 100. ▪ Identifies and represents numbers using pictorial representations (up to 20)
ARE 2 (L12)	<ul style="list-style-type: none"> ▪ Counts in steps of 2 (from 0 up to 12x) forwards and backwards. ▪ Counts in steps of 5 (from 0 up to 12x) forwards and backwards. ▪ Counts in steps of 10 (from 0 up to 12x) forwards and backwards. ▪ Recognises the place value of each digit in a two-digit number (tens, ones) ▪ Identifies numbers using different representations (up to 100) ▪ Represents numbers using different representations (up to 100) ▪ Estimates numbers using different representations (up to 100) ▪ Counts in tens from any number forward and backward, within 100 ▪ Reads and recognises all numbers to 100 ▪ Writes all numbers to 100 in numerals (using conventional and/or unconventional methods) ▪ Orders numbers from 0 up to 100 (in ascending and descending order) ▪ Uses <, > and = signs to compare numbers up to 100. ▪ Uses place value and number facts to solve problems, within 100.
ARE 3 (L13)	<ul style="list-style-type: none"> ▪ Finds 10 more than a given number, within 100. ▪ Finds 10 less than a given number, within 100. ▪ Recognises the place value of each digit in a three-digit number (hundreds, tens, ones) ▪ Orders numbers up to 1000 ▪ Compares numbers up to 1000, verbally and using inequality symbols (<, > and =) ▪ Identifies numbers using different representations (within 1000) ▪ Represents numbers using different representations (within 1000) ▪ Estimates numbers using different representations (within 1000) ▪ Finds 100 more than a given number, within 1000. ▪ Finds 100 less than a given number, within 1000. ▪ Finds 10 more than a given number, within 1000. ▪ Finds 10 less than a given number, within 1000. ▪ Recognises and reads numbers up to 1000 in numerals ▪ Writes numbers up to 1000 in numerals (using conventional and/or unconventional methods) ▪ Counts in multiples of 4 (from 0 up to 12x) forwards and backwards. ▪ Counts in multiples of 8 (from 0 up to 12x) forwards and backwards. ▪ Counts in multiples of 50 (from 0) forwards and backwards. ▪ Counts in multiples of 100 (from 0) forwards and backwards. ▪ Solves number problems and practical problems involving these ideas, up to 1000.
ARE 4 (L14)	<ul style="list-style-type: none"> ▪ Recognises and reads numbers up to 10,000 in numerals ▪ Writes numbers up to 10,000 in numerals (using conventional and/or unconventional methods) ▪ Recognises the place value of each digit in a four-digit number (thousands, hundreds, tens, ones) ▪ Identifies numbers using different representations (within 10,000) ▪ Represents numbers using different representations (within 10,000) ▪ Estimates numbers using different representations (within 10,000) ▪ Orders numbers beyond 1000 (up to 10,000) ▪ Compares numbers beyond 1000 (up to 10,000), verbally and using inequality symbols (<, > and =) ▪ Counts backwards through zero to include negative numbers ▪ Finds 1000 more than a given number, up to 10,000 ▪ Finds 1000 less than a given number, up to 10,000 ▪ Rounds any number to the nearest 10 (up to 10,000) ▪ Rounds any number to the nearest 100 (up to 10,000) ▪ Rounds any number to the nearest 1000 (up to 10,000) ▪ Counts in multiples of 6 (from 0 up to 12x) forwards and backwards. ▪ Counts in multiples of 7 (from 0 up to 12x) forwards and backwards. ▪ Counts in multiples of 9 (from 0 up to 12x) forwards and backwards. ▪ Counts in multiples of 25 (from 0) forwards and backwards. ▪ Counts in multiples of 1000 (from 0) forwards and backwards. ▪ Solves number problems and practical problems involving these ideas, up to 10,000
ARE 5 (L15)	<ul style="list-style-type: none"> ▪ Recognises and reads numbers up to 1,000,000 in numerals ▪ Writes numbers up to 1,000,000 in numerals (using conventional and/or unconventional methods) ▪ Orders numbers to 1,000,000 ▪ Compares numbers to 1,000,000, verbally and using inequality symbols (<, > and =) ▪ Recognises the place value of each digit in any number up to 1,000,000 ▪ Round any number up to 1,000,000 to the nearest 10 ▪ Round any number up to 1,000,000 to the nearest 100 ▪ Round any number up to 1,000,000 to the nearest 1000 ▪ Round any number up to 1,000,000 to the nearest 10,000 ▪ Round any number up to 1,000,000 to the nearest 100,000 ▪ Counts forwards in steps of powers of 10 for any given number up to 1,000,000 ▪ Counts backwards in steps of powers of 10 for any given number up to 1,000,000 ▪ Explains how a negative number is different to a positive number ▪ Interprets negative numbers in context (e.g. using a thermometer) ▪ Counts forwards with positive and negative whole numbers, including through zero ▪ Counts backwards with positive and negative whole numbers, including through zero

	<ul style="list-style-type: none"> Solves number problems and practical problems involving these ideas, up to 1,000,000
ARE 6 (L16)	<ul style="list-style-type: none"> Recognises and reads numbers up to 10,000,000 in numerals Writes numbers up to 10,000,000 in numerals (using conventional and/or unconventional methods) Orders numbers to 10,000,000 Compares numbers to 10,000,000, verbally and using inequality symbols (<, > and =) Recognises the place value of each digit in any number up to 10,000,000 Uses negative numbers in context Rounds any whole number, within 10,000,000 to a given amount Calculates intervals across zero Solves number problems and practical problems involving these ideas, up to 10,000,000

CALCULATION – ADDITION AND SUBTRACTION (AS) MULTIPLICATION AND DIVISION (MD) FRACTIONS, DECIMALS AND PERCENTAGES (FDP) RATIO AND PROPORTION (RP) ALGEBRA (ALG)	
EYFS – RANGE 3 (L7)	<ul style="list-style-type: none"> Responds to words like lots or more
EYFS – RANGE 4 (L8)	<ul style="list-style-type: none"> Beginning to compare and recognise changes in numbers of things, using words like more, lots or 'same'
EYFS – RANGE 5 (L9)	<ul style="list-style-type: none"> Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same! Compares groups of objects using the language 'more than', 'less than' and 'equal to'. Beginning to use understanding of number to solve practical problems in play and meaningful activities Beginning to recognise that each counting number is one more than the one before Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same
EYFS – RANGE 6 (L10)	<ul style="list-style-type: none"> Uses number names and symbols when comparing numbers, showing interest in large numbers Estimates of numbers of things (up to 10), showing understanding of relative size In practical activities, adds one and subtracts one with numbers to 10 Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-" AS: Finds one more and one less of a number, within 20 AS: Recalls number bonds to 5 FDP: Understands and uses the language 'whole' and 'part' FDP: Folds a shape and knows that this is 'half'
ARE 1 (L11)	<ul style="list-style-type: none"> AS: Represents and uses number bonds within 10 and recognises that these are commutative AS: Represents and uses number bonds and related subtraction facts within 10 AS: Reads and interprets mathematical statements involving addition (+) and equals (=) signs within 20 AS: Reads and interprets mathematical statements involving subtraction (-) and equals (=) signs within 20 AS: Represents and uses number bonds within 20 and recognises that these are commutative AS: Represents and uses number bonds and related subtraction facts within 20 AS: Adds one-digit numbers to 20, including zero AS: Subtracts one-digit numbers to 20, including zero AS: Adds one-digit and two-digit numbers to 20, including zero AS: Subtracts one-digit and two-digit numbers to 20, including zero AS: Solves missing number problems involving adding and subtracting one-digit and two-digit numbers to 20. AS: Writes mathematical statements involving addition (+) and equals (=) signs AS: Writes mathematical statements involving subtraction (-) and equals (=) signs AS: Solves one-step problems that involve addition (up to 20) using concrete objects and pictorial representations AS: Solves one-step problems that involve subtraction (within 20) using concrete objects and pictorial representations AS: Knows and uses language associated with addition including: put together, add, altogether, total AS: Knows and uses language associated with subtraction including: take away, subtract, difference between, less than AS: Uses a calculator to check answers to addition and subtraction problems, linked to learning at this level MD: With support, groups objects/pictures into groups of 2, 5 and 10 MD: With support, counts groups of objects/pictures in 2s, 5s and 10s MD: With support, finds the total number of objects/pictures by counting in groups MD: Knows that doubling is the same as adding the same number twice MD: With support, makes an array to represent multiplication

	<ul style="list-style-type: none"> ▪ MD: Uses objects/pictures to work out doubles to 20 (up to double 10) ▪ MD: Recalls doubles to 20 (up to double 10, e.g. double 10, double 9, double 8...) ▪ MD: With support, explores the concept of division by sharing objects/pictures equally ▪ MD: Uses a calculator to check answers to multiplication and division problems, linked to learning at this level ▪ FDP: Understands that fractions are equal parts of a whole ▪ FDP: Recognises, finds and names a half as one of two equal parts of an object ▪ FDP: Recognises, finds and names a half as one of two equal parts of a shape ▪ FDP: Recognises, finds and names a half as one of two equal parts of a quantity ▪ FDP: Recognises, finds and names a quarter as one of four equal parts of an object ▪ FDP: Recognises, finds and names a quarter as one of four equal parts of a shape ▪ FDP: Recognises, finds and names a quarter as one of four equal parts of a quantity
ARE 2 (L12)	<ul style="list-style-type: none"> ▪ AS: Recalls and uses addition facts to 20 fluently ▪ AS: Recalls and uses subtraction facts to 20 fluently ▪ AS: Adds a two-digit number and ones (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Adds a two-digit number and tens (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Adds two two-digit numbers (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Adds three one-digit numbers (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Subtracts a one-digit number from a two-digit number (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Subtracts tens from a two-digit number (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Subtracts a two-digit number from a two-digit number (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Subtracts using three one-digit numbers (progressing from concrete objects, to pictorial representations to mentally) ▪ AS: Recognises the inverse relationship between addition and subtraction ▪ AS: Solves problems with addition (involving numbers, quantities and measures) using concrete objects and pictorial representations ▪ AS: Solves problems with subtraction (involving numbers, quantities and measures) using concrete objects and pictorial representations ▪ AS: Uses bonds to 10 and 20 to derive and use addition facts up to 100 (e.g. $3 + 7 = 10$ so $30 + 70 = 100$) ▪ AS: Derives subtraction facts up to 100 (e.g. $30 + 70 = 100$ so $100 - 30 = 70$) ▪ AS: Recognises that addition of two numbers can be done in any order (commutative) ▪ AS: Uses the inverse relationship between addition and subtraction to check calculations ▪ AS: Solves problems with addition (involving numbers, quantities and measures) mentally ▪ AS: Solves problems with subtraction (involving numbers, quantities and measures) mentally ▪ AS: Recognises that subtraction of one number from another cannot be done in any order ▪ AS: Uses the inverse relationship between addition and subtraction to solve missing number problems ▪ AS: Uses a calculator to check answers to addition and subtraction problems, linked to learning at this level ▪ MD: Understands the concept of multiplication as 'repeated addition' and can represent multiplication as repeated addition ▪ MD: Uses an array to represent and solve multiplication ▪ MD: Recalls and uses multiplication facts for the 2 times table ▪ MD: Recalls and uses multiplication facts for the 5 times table ▪ MD: Recalls and uses multiplication facts for the 10 times table ▪ MD: Recognises odd and even numbers ▪ MD: Understands and calculates division based on the concept of 'sharing' or 'grouping' ▪ MD: Recalls and uses division facts for the 2 times table ▪ MD: Recalls and uses division facts for the 5 times table ▪ MD: Recalls and uses division facts for the 10 times table ▪ MD: Calculates mathematical statements for multiplication within the multiplication tables ▪ MD: Calculate mathematical statements for division within the multiplication tables ▪ MD: Writes mathematical statements for multiplication using the multiplication (\times) and equals (=) signs ▪ MD: Writes mathematical statements for division using the division (\div) and equals (=) signs ▪ MD: Shows understanding that multiplication of two numbers can be done in any order (commutative) ▪ MD: Shows understanding that division of one number by another cannot be done in any order ▪ MD: Solves problems involving multiplication (progressing from using concrete apparatus, to pictorial representations and then mentally) ▪ MD: Solves problems involving division (progressing from using concrete apparatus, to pictorial representations and then mentally) ▪ MD: Uses a calculator to check answers to multiplication and division problems, linked to learning at this level ▪ FDP: Begins to use the terms 'numerator' and 'denominator' ▪ FDP: Recognises fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity ▪ FDP: Names fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity ▪ FDP: Finds fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity

	<ul style="list-style-type: none"> ▪ FDP: Writes fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ in numerical form ▪ FDP: Identifies how many halves, thirds and quarters make a whole ▪ FDP: I can write simple fractions for example, $\frac{1}{2}$ of 6 = 3 ▪ FDP: I can recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
<p>ARE 3 (L13)</p>	<ul style="list-style-type: none"> ▪ AS: Recalls a range of number bond facts including pairs of multiples of ten that make 100, multiples of five that make 100 and multiples of one hundred that make 1000 ▪ AS: Adds numbers mentally, including a three-digit number and ones ▪ AS: Subtracts numbers mentally, including a three-digit number and ones ▪ AS: Estimates the answer to a calculation ▪ AS: Adds numbers mentally, including a three-digit number and tens ▪ AS: Subtracts numbers mentally, including a three-digit number and tens ▪ AS: Adds numbers mentally, a three-digit number and hundreds ▪ AS: Subtracts numbers mentally, a three-digit number and hundreds ▪ AS: Uses the inverse operations to check answers ▪ AS: Adds numbers with up to three digits, using formal written methods of column addition ▪ AS: Subtracts numbers with up to three digits, using formal written methods of column subtraction ▪ AS: Solves a range of addition problems, including missing number problems (including adding a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds and two three-digit numbers) ▪ AS: Solves a range of subtraction problems, including missing number problems (including subtracting a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds and two three-digit numbers) ▪ AS: Uses a calculator to check answers to addition and subtraction problems, linked to learning at this level <ul style="list-style-type: none"> ▪ MD: Recalls and uses multiplication facts for the 3 times table ▪ MD: Recalls and uses multiplication facts for the 4 times table ▪ MD: Recalls and uses multiplication facts for the 8 times table ▪ MD: Writes mathematical statements (using x and =) for multiplication using known multiplication tables ▪ MD: Recalls and uses division facts for the 3 times table ▪ MD: Recalls and uses division facts for the 4 times table ▪ MD: Recalls and uses division facts for the 8 times table ▪ MD: Writes mathematical statements (using ÷ and =) for division using known multiplication tables ▪ MD: Shows an understanding and makes links between known times tables ▪ MD: Calculates a two-digit number multiplied by a one-digit number, progressing from a mental method to a formal written method ▪ MD: Writes mathematical statements (using x and =) for two-digit numbers times one-digit numbers ▪ MD: Calculates a two-digit number divided by a one-digit number, progressing from a mental method to a formal written method ▪ MD: Writes mathematical statements (using ÷ and =) for two-digit numbers divided by one-digit numbers progressing to formal written methods ▪ MD: Solves missing number problems involving multiplication ▪ MD: Solves missing number problems involving division ▪ MD: Solve integer scaling problems linked to multiplication (e.g. Tom has a car that is 3cm long. He wants to build a car that is 5 times as long. How long will the car be?) ▪ MD: Solve integer scaling problems relating to division (e.g. An adult giraffe's leg is 3 times as long as a baby giraffe's leg. The adult giraffe's leg is 180cm. How long is the baby's leg?) ▪ MD: Solves problems, involving multiplication including correspondence problems in which n objects are connected to m objects. ▪ MD: Solves problems, involving division including correspondence problems in which n objects are connected to m objects ▪ MD: Uses a calculator to check answers to multiplication and division problems, linked to learning at this level <ul style="list-style-type: none"> ▪ FDP: Recognises, finds and writes unit fractions of a discrete set of objects ▪ FDP: Recognises, finds and writes non-unit fractions (with small denominators) of a discrete set of objects ▪ FDP: Recognises and uses unit fractions as numbers (e.g. on fraction number lines, in fraction sequences) ▪ FDP: Recognises and uses non-unit fractions (with small denominators) as numbers (e.g. on fraction number lines, in fraction sequences) ▪ FDP: Counts up and down in tenths ▪ FDP: Recognises that tenths arise from dividing an object/one-digit numbers or quantities into 10 equal parts ▪ FDP: Compares unit fractions and fractions with the same denominators ▪ FDP: Orders unit fractions and fractions with the same denominators ▪ FDP: Uses resources (concrete and pictorial) to identify equivalent fractions ▪ FDP: Adds fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] ▪ FDP: Subtracts fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
<p>ARE 4 (L14)</p>	<ul style="list-style-type: none"> ▪ AS: Adds and subtracts 1, 10, 100 and 1000 to and from a four-digit number ▪ AS: Adds numbers with up to 4 digits using the formal written methods of columnar addition ▪ AS: Subtracts numbers with up to 4 digits using the formal written methods of columnar subtraction ▪ AS: Estimates the answer to a calculation, linked to learning at this level ▪ AS: Decides which operations to use and can justify this ▪ AS: Decides which methods to use and can justify this ▪ AS: Uses inverse operations to check answers to a calculation ▪ AS: Solves addition two-step problems in contexts, linked to learning at this level ▪ AS: Solves subtraction two-step problems in contexts, linked to learning at this level

	<ul style="list-style-type: none"> ▪ AS: Uses a calculator to check answers to addition and subtraction problems, linked to learning at this level ▪ MD: Recalls multiplication facts for multiplication tables up to 12×12 ▪ MD: Uses place value, known and derived facts to multiply by 0 and 1 ▪ MD: Uses place value, known and derived facts to divide by 1 ▪ MD: Uses place value, known and derived facts to multiply three numbers together ▪ MD: Multiplies two-digit numbers by a one-digit number using formal written method ▪ MD: Recognises and uses factor pairs in mental calculations ▪ MD: Recognises and uses commutativity in mental calculations ▪ MD: Recalls division facts for multiplication tables up to 12×12 ▪ MD: Multiplies three-digit numbers by a one-digit number using formal written method ▪ MD: Uses partitioning, rounding and adjusting to solve 2-digit by 1-digit number problems with increasing confidence ▪ MD: Uses multiplication and division facts to scale up and down ▪ MD: Uses a calculator to check answers to multiplication and division problems, linked to learning at this level ▪ FDP: Counts up and down in hundredths ▪ FDP: Recognises that hundredths arise when dividing an object by one hundred ▪ FDP: Recognises that hundredths arise when dividing tenths by ten ▪ FDP: Compares numbers with the same number of decimal places up to two decimal places ▪ FDP: Recognises families of common equivalent fractions ▪ FDP: Shows, using diagrams, families of common equivalent fractions ▪ FDP: Recognises and writes decimal equivalents of $\frac{1}{4}$ ▪ FDP: Recognises and writes decimal equivalents of $\frac{1}{2}$ ▪ FDP: Recognises and writes decimal equivalents of $\frac{3}{4}$ ▪ FDP: Rounds decimals with one decimal place to the nearest whole number ▪ FDP: Finds the effect of dividing a one-digit number by 10 identifying the value of the digits in the answer as ones, tenths and hundredths ▪ FDP: Finds the effect of dividing a one-digit number by 100 identifying the value of the digits in the answer as ones, tenths and hundredths ▪ FDP: Finds the effect of dividing a two-digit number by 10 identifying the value of the digits in the answer as ones, tenths and hundredths ▪ FDP: Finds the effect of dividing a two-digit number by 100 identifying the value of the digits in the answer as ones, tenths and hundredths ▪ FDP: Solves simple measure problems involving fractions ▪ FDP: Solves simple measure problems involving decimals to two decimal places ▪ FDP: Solves simple money problems involving fractions ▪ FDP: Solves simple money problems involving decimals to two decimal places. ▪ FDP: Adds fractions with the same denominator ▪ FDP: Subtracts fractions with the same denominator ▪ FDP: Solves problems involving increasingly harder fractions to calculate quantities ▪ FDP: Solves problems involving fractions to divide quantities, including non-unit fractions where the answer is a whole number ▪ FDP: Recognises and writes decimal equivalents of any number of tenths ▪ FDP: Recognises and writes decimal equivalents of any number of hundredths
ARE 5 (L15)	<ul style="list-style-type: none"> ▪ AS: Adds whole numbers with more than 4 digits using the formal written methods of columnar addition ▪ AS: Subtracts whole numbers with more than 4 digits using the formal written methods of columnar subtraction ▪ AS: Adds numbers mentally with increasingly large numbers ▪ AS: Subtracts numbers mentally with increasingly large numbers ▪ AS: Uses rounding to check answers to calculations, linked to learning at this level ▪ AS: Uses rounding to determine, in the context of a problem, levels of accuracy ▪ AS: Solves addition multi-step problems in contexts, deciding which operations and methods to use and why, linked to learning at this level ▪ AS: Solves subtraction multi-step problems in contexts, deciding which operations and methods to use and why, linked to learning at this level ▪ AS: Uses a calculator to check answers to addition and subtraction problems, linked to learning at this level ▪ MD: Understands the term 'multiple' and is able to identify them ▪ MD: Understands the term 'factor' and can find all factor pairs of a number ▪ MD: Identifies factors, including common factors of two numbers ▪ MD: Understands and can explain the term 'prime number' ▪ MD: Understands and can explain the term 'prime factors' ▪ MD: Understands and can explain the term 'composite number' (non prime) ▪ MD: Can establish whether a number up to 100 is prime ▪ MD: Recalls prime numbers up to 19 ▪ MD: Multiplies numbers mentally drawing upon known facts ▪ MD: Divides numbers mentally drawing upon known facts ▪ MD: Multiplies whole numbers and those involving decimals by 10, 100 and 1000 ▪ MD: Divides whole numbers and those involving decimals by 10, 100 and 1000 ▪ MD: Multiplies numbers (up to 4 digits) by a one-digit number using a formal written method ▪ MD: Multiplies numbers (up to 4 digits) by a two-digit number using a formal written method, including long multiplication for two-digit numbers

	<ul style="list-style-type: none"> ▪ MD: Divides numbers (up to 4 digits) by a one-digit number using the formal written method of short division ▪ MD: Interprets remainders appropriately for the context ▪ MD: Recognises and uses square numbers and the notation for squared (²) ▪ MD: Recognises and uses cube numbers, and the notation for cubed (³) ▪ MD: Solves problems involving all four operations ▪ MD: Solves problems using knowledge of factors and multiples ▪ MD: Solves problems using knowledge of squares and cubes ▪ MD: Solves problems including scaling by simple fractions ▪ MD: Solves problems involving simple rates ▪ MD: Uses a calculator to check answers to multiplication and division problems, linked to learning at this level ▪ FDP: Compares fractions whose denominators are all multiples of the same number ▪ FDP: Orders fractions whose denominators are all multiples of the same number ▪ FDP: Identifies, names and writes equivalent fractions of a given fraction represented visually, including tenths and hundredths ▪ FDP: Adds fractions with the same denominator, exceeding 1 ▪ FDP: Subtracts fractions with the same denominator, exceeding 1 ▪ FDP: Reads and writes decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] ▪ FDP: Rounds decimals with two decimal places to the nearest whole number ▪ FDP: Rounds decimals with two decimal places to one decimal place ▪ FDP: Reads numbers with up to three decimal places ▪ FDP: Writes numbers with up to three decimal places ▪ FDP: Orders numbers with up to three decimal places ▪ FDP: Compares numbers with up to three decimal places ▪ FDP: Recognises mixed numbers ▪ FDP: Recognises improper fractions ▪ FDP: Adds fractions with denominators that are multiples of the same number ▪ FDP: Subtracts fractions with denominators that are multiples of the same number ▪ FDP: Recognises and uses thousandths and relate them to tenths ▪ FDP: Recognises and uses thousandths and relate them to hundredths ▪ FDP: Solves problems involving numbers with up to three decimal places ▪ FDP: Writes mathematical statements more than 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] ▪ FDP: Converts from mixed numbers to improper fractions and vice versa ▪ FDP: Recognises and uses thousandths and relate them to decimal equivalents ▪ FDP: Recognises the per cent symbol (%) ▪ FDP: Multiplies proper fractions by whole numbers, supported by materials and then diagrams ▪ FDP: Multiplies mixed numbers by whole numbers, supported by materials and then diagrams ▪ FDP: I can multiply mixed numbers by whole numbers, supported by diagrams ▪ FDP: Understands that per cent relates to 'number of parts per hundred' ▪ FDP: Writes percentages as a fraction with denominator 100 e.g. $\frac{60}{100} = 60\%$ ▪ FDP: Writes percentages as a decimal ▪ FDP: Solves problems which require knowing percentage equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}$ and $\frac{4}{5}$ ▪ FDP: Solves problems which require knowing decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}$ and $\frac{4}{5}$ ▪ FDP: Solves problems which require knowing percentage or decimal equivalents of fractions with a denominator of a multiple of 10 ▪ FDP: Solves problems which require knowing percentage or decimal equivalents of fractions with a denominator of a multiple of 25
ARE 6 (L16)	<ul style="list-style-type: none"> ▪ AS: Adds and subtracts numbers, including decimals, using a formal written method ▪ AS: Solves addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why ▪ AS: Uses a calculator to check answers to addition and subtraction problems, linked to learning at this level ▪ MD: Multiplies multi-digit numbers (up to 4-digits) by a two-digit whole number using the formal written method of long multiplication ▪ MD: Divides numbers (up to 4-digits) by a two-digit whole number using the formal written method of long division ▪ MD: Interprets remainders as fractions, as appropriate for the context ▪ MD: Interprets remainders by rounding, as appropriate for the context ▪ MD: Interprets remainders as whole number remainders, as appropriate for the context ▪ MD: Perform mental calculations, including with mixed operations ▪ MD: Performs mental calculations, including with large numbers ▪ MD: Divides numbers (up to 4-digits) by a two-digit whole number using the formal written method of tim division ▪ MD: Identifies common factors ▪ MD: Identifies common multiples ▪ MD: Identifies prime numbers ▪ MD: Solves multi-step problems involving all four operations ▪ MD: Uses estimation to check answers to calculations ▪ MD: Uses estimation to determine, in the context of a problem, an appropriate degree of accuracy ▪ MD: Uses knowledge of the order of operations to carry out calculations involving the four operations ▪ MD: Uses a calculator to check answers to multiplication and division problems, linked to learning at this level

- FDP: Uses common factors to simplify fractions
- FDP: Uses common multiples to express fractions in the same denomination
- FDP: Compares fractions, including fractions more than 1
- FDP: Order fractions, including fractions more than 1
- FDP: Associates a fraction with division
- FDP: Calculates decimal fraction equivalents [e.g. 0.375] for a simple fraction [e.g. $\frac{3}{8}$]
- FDP: Identifies the value of each digit in numbers given to three decimal places
- FDP: Recalls and uses equivalences between simple fractions, decimals and percentages, including in different contexts.
- FDP: Adds fractions with different denominators using the concept of equivalent fractions
- FDP: Subtracts fractions with different denominators using the concept of equivalent fractions
- FDP: Multiplies and divides numbers by 10, giving answers up to three decimal places
- FDP: Multiplies and divides numbers by 100, giving answers up to three decimal places
- FDP: Multiplies and divides numbers by 1000, giving answers up to three decimal places
- FDP: Multiplies one-digit numbers with up to two decimal places by whole numbers
- FDP: Adds mixed numbers using the concept of equivalent fractions
- FDP: Subtracts mixed numbers using the concept of equivalent fractions
- FDP: Multiplies simple pairs of proper fractions, writing the answer in its simplest form [e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
- FDP: Divides proper fractions by whole numbers [e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$]
- FDP: Uses written division methods in cases where the answer has up to two decimal places
- FDP: Solves problems which require answers to be rounded to specified degrees of accuracy

- RP: Solves problems involving the calculation of percentages [for example, of measures, and such as 15% of 360]
- RP: Solves problems involving the use of percentages for comparison
- RP: Solves problems involving similar shapes where the scale factor is known or can be found
- RP: Solves problems involving unequal sharing and grouping using knowledge of fractions and multiples
- RP: Solves problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

- ALG: Uses simple formulae
- ALG: Generates and describes linear number sequences
- ALG: Expresses missing number problems algebraically
- ALG: Finds pairs of numbers that satisfy an equation with two unknowns
- ALG: Enumerates possibilities of combinations of two variables

GEOMETRY – SHAPE (GPS), POSITION AND DIRECTION (GPD), PATTERN (PAT)	
EYFS – RANGE 3 (L7)	<ul style="list-style-type: none"> ▪ GPD: Enjoys filling and emptying containers ▪ GPD: Investigates fitting themselves inside and moving through spaces ▪ GPS: Pushes objects through different shaped holes, and attempts to fit shapes into spaces on inset boards or puzzles ▪ GPS: Beginning to select a shape for a specific space ▪ GPS: Enjoys using blocks to create their own simple structures and arrangements ▪ PAT: Becoming familiar with patterns in daily routines ▪ PAT: Joins in and predicts what comes next in a story or rhyme ▪ PAT: Beginning to arrange items in their own patterns, e.g. lining up toys ▪ PAT: Completes object to picture matching (identical and non-identical) ▪ PAT: Completes puzzles beyond 12 pieces
EYFS – RANGE 4 (L8)	<ul style="list-style-type: none"> ▪ GPD: Moves their bodies and toys around objects and explores fitting into spaces ▪ GPD: Begins to remember their way around familiar environments ▪ GPD: Responds to some spatial and positional language ▪ GPD: Explores how things look from different viewpoints including things that are near or far away ▪ GPS: Chooses puzzle pieces and tries to fit them in ▪ GPS: Recognises that two objects have the same shape ▪ GPS: Makes simple constructions ▪ PAT: Joins in and anticipates repeated sound and action patterns ▪ PAT: Is interested in what happens next using the patterns of everyday routines ▪ PAT: Copies a pattern using objects
EYFS – RANGE 5 (L9)	<ul style="list-style-type: none"> ▪ GPD: Responds to and uses language of position and direction ▪ GPD: Predicts, moves and rotates objects to fit the space or create the shape they would like ▪ GPS: Chooses items based on their shape which are appropriate for the child's purpose ▪ GPS: Responds to both informal language and common shape names ▪ GPS: Shows awareness of shape similarities and differences between objects ▪ GPS: Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes ▪ GPS: Attempts to create arches and enclosures when building, using trial and improvement to select block ▪ PAT: Creates their own spatial patterns showing some organisation or regularity ▪ PAT: Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC) ▪ PAT: Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next ▪ PAT: Identifies the 'odd one out' from a group of objects/pictures
EYFS – RANGE 6 (L10)	<ul style="list-style-type: none"> ▪ GPD: Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints ▪ GPD: Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning) ▪ GPD: May enjoy making simple maps of familiar and imaginative environments, with landmarks ▪ GPS: Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes ▪ GPS: Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes ▪ GPS: Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build ▪ PAT: Spots patterns in the environment, beginning to identify the pattern "rule" ▪ PAT: Completes a given pattern (up to 3 stage repeating, using objects and pictures) ▪ PAT: Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat ▪ PAT: Creates own repeating pattern (up to 3-stage) using objects, pictures and abstract symbols
ARE 1 (L11)	<ul style="list-style-type: none"> ▪ GPS: Recognises and names common 2-D shapes: rectangles (including squares), circles and triangles ▪ GPS: Identifies 2D shapes in real life context ▪ GPS: Recognises and names common 3-D shapes: cuboids (including cubes), pyramids and spheres ▪ GPS: Identifies 3D shapes in real life context ▪ GPS: Recognises the link between 2D and 3D shapes ▪ GPD: Uses language of position including: top, middle, bottom, on top of, in front of, above, between, around, near, close, far, inside, outside ▪ GPD: Sometimes uses language of direction including: left, right, up, down, forwards, backwards ▪ GPD: Begins to make and describes whole, half, quarter and three-quarter turns ▪ GPD: Recognises and begins to use 'clockwise' and 'anti-clockwise'
ARE 2 (L12)	<ul style="list-style-type: none"> ▪ GPS: Identifies and describes the properties of 2D shapes, including the number of sides ▪ GPS: Identifies and describes the properties of 2D shapes, including line symmetry in a vertical line ▪ GPS: Identifies 2D shapes on the surface of 3D shapes [for example, a circle on a cylinder and a triangle on a pyramid] ▪ GPS: Compares common 2D and 3D shapes. ▪ GPS: Identifies and describes the properties of 3D shapes, including the number of edges ▪ GPS: Identifies and describes the properties of 3D shapes, including the number of vertices

	<ul style="list-style-type: none"> ▪ GPS: Identifies and describes the properties of 3D shapes, including the number of faces ▪ GPS: Sorts common 2D and 3D shapes. ▪ GPD: Orders and arranges combinations of mathematical objects in patterns and sequences ▪ GPD: ▪ GPD: Uses mathematical vocabulary to describe direction and movement including: left, right, up, down, forwards, backwards ▪ GPD: Uses mathematical vocabulary to describe movement in a straight line ▪ GPD: Begins to recognise right angles in movement and in shapes. ▪ GPD: Uses mathematical language accurately to describe rotation using whole, half, quarter and three-quarter turns ▪ GPD: Accurately uses 'clockwise' and 'anti-clockwise'
ARE 3 (L13)	<ul style="list-style-type: none"> ▪ GPS: Accurately draws 2D shapes ▪ GPS: Recognises angles as a description of a turn ▪ GPS: Identifies right angles in shapes ▪ GPS: Recognises that two right angles make a half-turn ▪ GPS: Makes 3D shapes using modelling materials ▪ GPS: Recognises angles as a property of shape ▪ GPS: Identifies horizontal and vertical lines ▪ GPS: Identifies pairs of perpendicular and parallel lines ▪ GPS: Recognises 3D shapes in different orientations and describes them ▪ GPS: Recognises that three right angles make three quarters of a turn ▪ GPS: Recognises that four right angles make a complete turn ▪ GPS: Identifies whether angles are greater than (obtuse) or less (acute) than a right angle ▪ GPS: Accurately draws horizontal and vertical lines ▪ GPS: Identifies pairs of parallel lines ▪ GPS: Identifies pairs of perpendicular lines
ARE 4 (L14)	<ul style="list-style-type: none"> ▪ GPS: Compares geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ▪ GPS: Classifies geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ▪ GPS: Names and identifies the properties of different triangles – isosceles, equilateral, scalene ▪ GPS: Names and identifies the properties of different quadrilaterals – parallelogram, rhombus, trapezium ▪ GPS: Identifies acute angles ▪ GPS: Identifies obtuse angles ▪ GPS: Identifies lines of symmetry in 2D shapes presented in different orientations ▪ GPS: Compares angles up to two right angles by size ▪ GPS: Orders angles up to two right angles by size ▪ GPS: Draws symmetrical patterns using different orientations of lines of symmetry ▪ GPS: Recognises the line of symmetry in pictures/diagrams/patterns ▪ GPS: Completes a simple symmetric figure with respect to a specific line of symmetry ▪ GPD: Describes positions on a 2D grid as coordinates in the first quadrant ▪ GPD: Plots specified points on a grid ▪ GPD: Draws sides to complete a given polygon. ▪ GPD: Describes movements between positions as translations of a given unit to the left/right ▪ GPD: Describes movements between positions as translations of a given unit up/down
ARE 5 (L15)	<ul style="list-style-type: none"> ▪ GPS: Identifies 3D shapes, including cubes and other cuboids, from 2D representations ▪ GPS: Knows angles are measured in degrees and uses the correct notation for degrees (°) ▪ GPS: Estimates acute, obtuse and reflex angles ▪ GPS: Compares acute, obtuse and reflex angles ▪ GPS: Identifies other multiples of 90° ▪ GPS: Identifies angles at a point on a straight line and half a turn (total 180°) ▪ GPS: Distinguishes between regular and irregular polygons based on reasoning about equal sides and angles ▪ GPS: Draws given angles using a protractor to measure in degrees (°) ▪ GPS: Measures angles, using a protractor, in degrees (°) ▪ GPS: Identifies angles at a point and one whole turn (total 360°) ▪ GPS: Uses the properties of rectangles to deduce related facts ▪ GPS: Finds missing lengths of a rectangle ▪ GPS: Finds missing angles of a rectangle ▪ GPD: Identifies the position of a shape following a reflection using the appropriate language, and know that the shape has not changed. ▪ GPD: Describes the position of a shape following a reflection using the appropriate language, and know that the shape has not changed. ▪ GPD: Identifies the position of a shape following a translation using the appropriate language, and know that the shape has not changed. ▪ GPD: Describes the position of a shape following a translation using the appropriate language, and know that the shape has not changed ▪ GPD: Represents the position of a shape following a reflection, using the appropriate language, and know that the shape has not changed. ▪ GPD: Represents the position of a shape following a translation, using the appropriate language, and know that the shape has not changed.
ARE 6 (L16)	<ul style="list-style-type: none"> ▪ GPS: Draws 2D shapes using given dimensions ▪ GPS: Draws 2D shapes using given angles ▪ GPS: Recognises, describes and builds simple 3D shapes. ▪ GPS: Recognises and describes a 3D shape from its net.

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| | <ul style="list-style-type: none">▪ GPS: Draws the net for a 3D shape▪ GPS: Compares geometric shapes based on their properties▪ GPS: Compares geometric shapes based on their sizes▪ GPS: Classifies geometric shapes based on their properties▪ GPS: Classifies geometric shapes based on their sizes▪ GPS: Recognises angles where they meet at a point, are on a straight line, or are vertically opposite▪ GPS: Finds unknown angles in any triangles▪ GPS: Finds unknown angles in any quadrilaterals▪ GPS: Finds unknown angles in regular polygons▪ GPS: Illustrates and name parts of circles, including radius, diameter and circumference▪ GPS: Knows that the diameter is twice the radius
▪ GPD: Draws simple shapes on the coordinate plane, and reflect them in the axes.▪ GPD: Describes positions on the full coordinate grid (all four quadrants)▪ GPD: Translates simple shapes on the coordinate plane, and reflect them in the axes.▪ GPD: Reflects simple shapes in the axes |
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STATISTICS	
EYFS – RANGE 3 (L7)	<ul style="list-style-type: none"> • Selects particular objects and discards others, for their own specific purpose.
EYFS – RANGE 4 (L8)	<ul style="list-style-type: none"> • Sorts a range of objects using own criteria, with no explanation (may not be obvious to adults how the objects have been sorted but the pupil has gone through the sorting process).
EYFS – RANGE 5 (L9)	<ul style="list-style-type: none"> ▪ Sorts a range of objects/pictures based on a given criteria
EYFS – RANGE 6 (L10)	<ul style="list-style-type: none"> ▪ Talks about favourite things and compares this to a peer groups ▪ Collects information from the immediate environment (e.g. how many cars can we see?) ▪ Explores data collection by asking questions and collecting information ▪ Sorts objects/pictures into two groups based on a given criteria (to include colour, type of object and size) ▪ Sorts the same group of objects by a range of given criteria (e.g. sorting animals by type of animal and amount of legs)
ARE 1 (L11)	<ul style="list-style-type: none"> ▪ Understands that lists can be ordered in different ways, containing words, numbers or both ▪ Obtains simple information (written and numerical) from a given list (e.g. what did Tom choose for dinner?) ▪ Sorts information by a given criteria ▪ Sorts a group of objects/pictures into two sets, using own criteria ▪ Sorts a group of objects/pictures into three sets, using own criteria ▪ Explains the criteria that has been chosen for sorting and explains why
ARE 2 (L12)	<ul style="list-style-type: none"> ▪ Understands what a tally chart is ▪ Reads information from a tally chart ▪ Collects information using a tally chart ▪ Interprets simple pictograms ▪ Interprets tally charts ▪ Interprets block diagrams ▪ Interprets simple tables ▪ Constructs simple pictograms ▪ Constructs tally charts ▪ Constructs block diagrams ▪ Constructs simple tables ▪ Asks and answers simple questions by counting the number of objects in each category and sorting the categories by quantity ▪ Asks questions about totalling and comparing categorical data. ▪ Answers questions about totalling and comparing categorical data
ARE 3 (L13)	<ul style="list-style-type: none"> ▪ Interprets data from bar charts ▪ Interprets data from pictograms ▪ Interprets data from tables ▪ Present data using bar charts ▪ Presents data using pictograms ▪ Presents data using tables ▪ Solves one-step questions using information presented in scaled bar charts ▪ Solves one-step questions using information presented in pictograms ▪ Solves one-step questions using information presented in tables ▪ Solves two-step questions using information presented in scaled bar charts ▪ Solves two-step questions using information presented in pictograms ▪ Solves two-step questions using information presented in tables
ARE 4 (L14)	<ul style="list-style-type: none"> ▪ Interprets discrete data using appropriate graphical methods, including bar charts and time graphs ▪ Interprets continuous data using appropriate graphical methods, including bar charts and time graphs ▪ Presents discrete data using appropriate graphical methods, including bar charts and time graphs ▪ Presents continuous data using appropriate graphical methods, including bar charts and time graphs ▪ Solves comparison problems using information presented in bar charts ▪ Solves sum problems using information presented in bar charts ▪ Solves difference problems using information presented in bar charts ▪ Solves comparison problems using information presented in pictograms ▪ Solves sum problems using information presented in pictograms ▪ Solves difference problems using information presented in pictograms ▪ Solves comparison problems using information presented in tables ▪ Solves sum problems using information presented in tables ▪ Solves difference problems using information presented in tables ▪ Solves comparison problems using information presented in other graphs ▪ Solves sum problems using information presented in other graphs ▪ Solves difference problems using information presented in other graphs
ARE 5 (L15)	<ul style="list-style-type: none"> ▪ Solves comparison problems using information presented in a line graph ▪ Solves sum problems using information presented in a line graph ▪ Solves difference problems using information presented in a line graph ▪ Reads information in tables, including timetables. ▪ Completes information in tables, including timetables. ▪ Interprets information in tables, including timetables.
ARE 6 (L16)	<ul style="list-style-type: none"> ▪ Interprets pie charts and uses the information to solve problems ▪ Constructs a pie chart and uses the information to solve problems ▪ Interprets line graphs and uses the information to solve problems ▪ Constructs a line graph and uses the information to solve problems ▪ Understands the term 'mean' as an average ▪ Calculates the mean ▪ Interprets the mean

MEASURE TIME (TIME) MONEY (MON)	
EYFS – RANGE 3 (L7)	<ul style="list-style-type: none"> Shows an interest in size and weight Explores capacity by selecting, filling and emptying containers, e.g. fitting toys in a pram TIME: Beginning to understand that things might happen now or at another time, in routines
EYFS – RANGE 4 (L8)	<ul style="list-style-type: none"> Explores differences in size, length, weight and capacity Measures out requested ingredients, using the provided non-standard units (e.g. give me a cup of flour) TIME: Beginning to understand some talk about immediate past and future TIME: Beginning to anticipate times of the day such as mealtimes or home time
EYFS – RANGE 5 (L9)	<ul style="list-style-type: none"> In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items MON: Hands over a token in exchange for something wanted (e.g. in role play or during snack time) MON: Role-plays a shop and the giving/receiving of money TIME: Recalls a sequence of events in everyday life and stories TIME: Knows that the end of a sand timer represents the end of a time period
EYFS – RANGE 6 (L10)	<ul style="list-style-type: none"> Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy Becomes familiar with measuring tools in everyday experiences and play Makes comparisons in everyday learning and play, supported by an adult e.g. taller/shorter, bigger/smaller MON: With support, hands over the correct amount of 1p pieces for an item e.g. if an apple costs 4p, handing over 4 pennies TIME: Is increasingly able to order and sequence events using everyday language related to time TIME: Beginning to experience measuring time with timers and calendars TIME: Knows the names of and can order the four seasons TIME: Describes what each season is like – chooses pictures to represent each season or draws TIME: Matches clothing to the appropriate season TIME: Knows how old they are and when their birthday is
ARE 1 (L11)	<ul style="list-style-type: none"> Compares, describes and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] Compares, describes and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] Compares, describes and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Measure and record length and height Measure and record mass/weight Measure and record capacity and volume MON: Recognises and names all coins and notes MON: Knows the value of all coins and notes TIME: Compares, describes and solve practical problems for time [for example, quicker, slower, earlier, later] TIME: Measure and record time (hours, minutes, seconds) TIME: Sequences events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] TIME: Recognises and uses language relating to dates, including days of the week TIME: Recognises and uses language relating to dates, including weeks, months and years TIME: Tells the time to the hour and half past the hour (on an analogue clock) TIME: Draws the hands on a clock face to show time to the hour and half past the hour (on an analogue clock)
ARE 2 (L12)	<ul style="list-style-type: none"> Chooses and uses appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit using rulers Chooses and uses appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales Chooses and uses appropriate standard units to estimate and measure temperature (°C) to the nearest appropriate unit using thermometers Chooses and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit using measuring vessels Compares lengths and record the results using >, < and = Compares mass and record the results using >, < and = Compares volume/capacity and record the results using >, < and = MON: Recognises and uses symbols for pounds (£) and pence (p) MON: Combines amounts to make a particular value MON: Finds different combinations of coins that equal the same amounts of money MON: Solves simple problems in a practical context involving addition of money of the same unit MON: Solves simple problems in a practical context involving subtraction of money of the same unit MON: Solves simple money problems in a practical context including giving change

	<ul style="list-style-type: none"> ▪ TIME: Knows the number of minutes in an hour ▪ TIME: Knows the number of hours in a day ▪ TIME: Compares intervals of time (within 60 minutes) ▪ TIME: Sequences intervals of time (within 60 minutes) ▪ TIME: Compares intervals of time (mixtures of minutes and hours) ▪ TIME: Sequences intervals of time (mixtures of minutes and hours) ▪ TIME: Tells the time to five minutes, including quarter past/to the hour (on an analogue clock) ▪ TIME: Writes the time to five minutes, including quarter past/to the hour in words (e.g. quarter past 3) ▪ TIME: Draws the hands on an analogue clock face to show the time to five minutes, quarter past and quarter to the hour
ARE 3 (L13)	<ul style="list-style-type: none"> ▪ Measures lengths (m/cm/mm) ▪ Compares lengths (m/cm/mm) ▪ Adds lengths (m/cm/mm) ▪ Subtracts lengths (m/cm/mm) ▪ Measures mass (kg/g) ▪ Compares mass (kg/g); ▪ Adds mass (kg/g) ▪ Subtracts mass (kg/g) ▪ Measures volume/capacity (l/ml) ▪ Compares volume/capacity (l/ml) ▪ Adds volume/capacity (l/ml) ▪ Subtracts volume/capacity (l/ml) ▪ Measures the perimeter of simple 2D shapes <ul style="list-style-type: none"> ▪ MON: Add amounts of money to give change ▪ MON: Subtracts amounts of money to give change ▪ MON: Uses both £ and p in practical contexts <ul style="list-style-type: none"> ▪ TIME: Reads the time in minute intervals on an analogue clock ▪ TIME: Reads digital clocks in five minute intervals (12 hour clock) and states the time in analogue form. ▪ TIME: Estimates time with increasing accuracy to the nearest minute ▪ TIME: Uses vocabulary including o'clock, a.m./p.m. ▪ TIME: Uses vocabulary including morning, afternoon, noon and midnight ▪ TIME: Knows the number of seconds in a minute and the number of days in each month, year and leap year ▪ TIME: Records time in terms of seconds, minutes and hours ▪ TIME: Compares time in terms of seconds, minutes and hours ▪ TIME: Tells and writes the time on an analogue clock including using Roman numerals from I to XII ▪ TIME: Compares durations of events [for example to calculate the time taken by particular events or tasks]
ARE 4 (L14)	<ul style="list-style-type: none"> ▪ Converts between different units of measure – length (e.g. kilometre to metre) ▪ Converts between different units of measure – weight (e.g. kilogram to gram) ▪ Converts between different units of measure – volume/capacity (e.g. litre to millilitre) ▪ Measures the perimeter of a rectilinear figure (including squares) in centimetres and metres ▪ Calculates the perimeter of a rectilinear figure (including squares) in centimetres and metres ▪ Estimates, compares and calculates length ▪ Estimates, compares and calculates weight ▪ Estimates, compares and calculates volume/capacity ▪ Finds the area of rectilinear shapes by counting squares within the shape <ul style="list-style-type: none"> ▪ MON: Convert between different units of measure – money (pounds to pence) ▪ MON: Estimates, compares and calculates amounts of money <ul style="list-style-type: none"> ▪ TIME: Reads time on analogue and digital 12- and 24-hour clocks ▪ TIME: Writes time associated with analogue and digital 12- and 24-hour clocks ▪ TIME: Converts time between analogue and digital 12- and 24-hour clocks ▪ TIME: Solves problems involving converting from hours to minutes ▪ TIME: Solves problems involving converting minutes to seconds ▪ TIME: Solves problems involving converting years to months ▪ TIME: Solves problems involving converting weeks to days
ARE 5 (L15)	<ul style="list-style-type: none"> ▪ Measures the perimeter of composite rectilinear shapes in centimetres and metres ▪ Calculates the perimeter of composite rectilinear shapes in centimetres and metres ▪ Estimates volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] ▪ Estimates capacity [for example, using water] ▪ ▪ Calculates the area of rectangles (including squares), including using standard units, square centimetres (cm²) ▪ MEA: I can calculate the area of rectangles (including squares), and denote this using standard units (cm²/m²) ▪ Estimates the area of irregular shapes, in centimetres and metres ▪ Compares the area of rectangles (including squares), in centimetres and metres ▪ Understands approximate equivalences between metric units and common imperial units such as inches, pounds and pints ▪ Uses approximate equivalences between metric units and common imperial units such as inches, pounds and pints ▪ Converts between different units of metric measure including length, weight, volume/capacity

	<ul style="list-style-type: none"> ▪ Uses all four operations to solve problems involving length ▪ Uses all four operations to solve problems involving mass ▪ Uses all four operations to solve problems involving volume ▪ MON: Uses all four operations to solve problems involving money ▪ TIME: Interprets simple timetables ▪ TIME: Calculates days/weeks from one date to another ▪ TIME: Solves problems involving converting between units of time
ARE 6 (L16)	<ul style="list-style-type: none"> ▪ Solves problems involving the calculation of units of measure, using decimal notation up to three decimal places where appropriate ▪ Reads, writes and uses standard units for length, mass and volume ▪ Recognises that shapes with the same areas can have different perimeters and vice versa ▪ Recognises when it is possible to use formulae for area of shapes ▪ Recognises when it is possible to use formulae for volume of shapes ▪ Calculates the area of parallelograms ▪ Calculates the area of triangles ▪ Calculates volume of cubes and cuboids using standard units, including cubic centimetres (cm³)/cubic metres (m³) ▪ Estimates volume of cubes and cuboids using standard units, including cubic centimetres (cm³)/cubic metres (m³) ▪ Compares volume of cubes and cuboids using standard units, including cubic centimetres (cm³)/cubic metres (m³) ▪ Solves problems involving the conversion of units of measure, using decimal notation up to three decimal places where appropriate ▪ Converts between miles and kilometres ▪ Converts standard units of length/mass/volume, from a smaller unit to a larger unit, using decimal notation to up to three decimal places ▪ Converts standard units of length/mass/volume, from a larger unit to a smaller unit, using decimal notation to up to three decimal places