Mathematics Teaching sequence – Year 1 and 2

Children should engage with appropriate number and practical problems **throughout each topic**.

Statements highlighted in yellow have been identified as 'ready to progress' objectives: key concepts which are essential building blocks for the next steps in learning. These objectives must be embedded across the year so that children are fluent.
Resources to support teaching of these specific objectives can be found here:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1017683/Maths_guidance_KS_1_and_2.pdf
https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/

Year 1	Year 2	
Autumn Term	**Autumn Term**	**Key vocab for topic**
Number and Place value (4 weeks) • **Count within, to and across 100, forward and backwards, beginning with 0 or 1 or from any given number:** ▪ Count sets of objects reliably to 20 ▪ Read and write numerals from 1 to 20 in numerals and words ▪ Count forwards from any number within 20. ▪ Count backwards from any number within 20 ▪ Sequence numbers on a number line within 20 ▪ Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =: ▪ Given a number, identify one more and one less within 20 ▪ Compare sets of objects up to 20 using the language of more than less than, greater than and fewer than ▪ Compare numbers using the language of more than, less than, most, least and equal to ▪ Use the <> and = symbols to compare numbers up to 20 **Number and Place value review week (1 week)** **<u>Addition and subtraction (5 weeks)</u>**	**Number and Place value (4 weeks)** ▪ Count sets of objects reliably to 100 ▪ Read and write numerals to 100 in numerals and words ▪ Count forwards in steps 0 of 10 from any number, forwards and backwards ▪ Recognise the place value of each digit in a two-digit number (tens and ones) ▪ Identify, represent, partition and estimate numbers in different ways (up to 100), using different representations including the number line ▪ Reason about the location of any two digit number e.g. compare and order numbers from 0 to 100, identifying the next and previous multiple of 10. ▪ Use the <> and = symbols to compare numbers up to 100 **Number and Place value review week (1 week)** **<u>Addition and subtraction (5 weeks)</u>** **(Include appropriate reasoning using learnt facts/methods throughout e.g. missing numbers, comparing number sentences, finding totals to solve problems)**	Numerals, digits counting ,forwards backwards, more less , sequence tens (column) ones (column) place value compare, order less than , least more than , most greater than, equal to, the same as same , represent, estimate, partition, number line Add, plus, sum, more, total, altogether, subtract, less, difference,

(Include appropriate reasoning using learnt facts/methods throughout e.g. missing numbers, greater than and less than, finding totals to solve problems) • To use understand that a part whole model splits a number into parts and shows the whole (total) • Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. • To show different combinations of numbers to make a given whole (total) using the part/whole model - numbers within 20 • To use the ten frame and part - whole model to understand number bonds to 10 20. • To introduce addition, (and the symbols + and =) as combining parts and numbers, using the part whole model • Start to use the + and = sign to write and complete addition number sentences within 20. • Develop fluency in addition and subtraction facts within 10 • Introduce the concept of subtraction as take away when objects are taken from a group • Represent subtraction number stories as a number sentence using the - and = symbols • To represent subtraction by breaking the whole into parts • Read, write and interpret equations containing addition ( ), subtraction ( ) and equals ( ) symbols, and relate additive expressions and equations to real-life contexts. • Use number bonds to show related facts and fact families (e.g. 5+3 = 8, 3+5 = 8, 8-5 = 3, 8-3=5) using a part whole model **Review week - addition and subtraction (1 week)**	▪ Secure fluency in addition and subtraction facts within 10, through continued practice. ▪ Recall and use the addition and subtraction facts to 20 fluently (representing this is different ways for example part whole model, dienes, progressing to number sentences). ▪ Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships. ▪ Add and subtract across 10: ▪ Use known facts within 20 to add and subtract numbers to 100 ▪ Add numbers using concrete objects and pictorial representations, including 2 digit numbers and ones and two digit numbers and tens ▪ Add and subtract within 100 by applying related 1-digit addition and subtraction facts: add and subtract **only ones or only tens** to/from a 2 digit number, before adding and **subtracting any 2 digit numbers**: ▪ Add numbers mentally including 2 digit numbers and ones and two digit numbers and tens ▪ Show that addition of two numbers can be done in any order (commutative law). ▪ Subtract numbers using concrete objects and pictorial representations, including 2 digit numbers and ones and two digit numbers and tens ▪ Subtract numbers mentally including 2 digit numbers and ones and two digit numbers and tens ▪ Understand that subtraction cannot be done in any order. ▪ Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?". ▪ Recognise and use the inverse relationship between addition and subtractions and use this to check calculations	equals, parts, whole, altogether, bonds, relationship, inverse, partition, jump, pictorial, resources, commutative, inverse, equation, calculation, biggest, smallest, equal to, more than, less than, compare.

<u>Measures (lengths) 2 weeks</u> • Compare lengths and heights using the language of longer than, shorter than and taller than using non-standard units (e.g.cubes, steps) • Order lengths and heights using the language of first, second and third. • Measure lengths using non-standard units • Use a centimetre ruler to measure lengths of objects • Solve problems involving length **Autumn term review (2 weeks)**	and missing number problems (only within addition and subtraction calculations previously learnt) ▪ Compare addition and subtraction number sentences, saying which answer is the biggest/smallest/equal to **Review week - addition and subtraction (1 week)** **<u>Measurement - (2 weeks)</u>** ▪ To know that length and height can be measured in centimetres ▪ To know that a ruler can be used to measure in centimetres. ▪ Measure length of standard object in centimetres with a 30cm ruler ▪ To know that length and height can be measured in metres when the object is longer or taller ▪ Measure length of standard object in metres using a metre rule/trundle wheels ▪ Compare and order heights and lengths in any direction using < > and = to record the results ▪ Choose and use appropriate standard units to estimate and measure lengths and height ▪ Compare and order lengths in any direction using < > and = to record the results **Autumn term review and assess (2 weeks)**	Length, height, width, tall, taller, tallest, short, shorter, shortest, long longer, longest, small, ruler, accuracy, centimetres, metres, metre stick, more than, less than, equal to, unit of measurement.
Spring Term	**Spring Term**	
Count to and across 100, forward and backwards, beginning with 0 or 1 or from any given number (3 weeks) • Count forwards from any number within 50. • Count backwards from any number within 50 • Sequence numbers on a numberline within 50	**Number, place value (1 week)** • Count in steps of 5 from 0 forwards and backwards. • Count in steps of 2 from 0 forwards or backwards	Steps, forwards, backwards, number track, jumps, bigger, smaller.

• Given a number, identify one more and one less within 50 • Count in multiples of tens up to 50 • To know that 2 digit numbers are made up of ones and 10s • To represent numbers as ones and tens • Compare numbers up to 50 using the language of more than less than, greater than and fewer than • Compare numbers using the language of more than, less than, most, least and equal to • Use the <> and = symbols to compare numbers up to 50 • Order numbers up to 50 **Multiplication and division (2 weeks)** • Count in multiples of 2 and 5 • Use number frames, mathematical equipment objects and pictures to find double of a number up to 10 • Use concrete objects and pictures to make equal groups • Add together equal groups that are represented as arrays • Know that we can divide sets of objects into groups with equal numbers • Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays and mental methods, Include relating grouping problems (where number of groups is unknown) to multiplication equations with a missing factor, and to division. **Review Week (1 week)**	**Multiplication (2 weeks)** • Make equal groups of 2, 5 and 10 and use these to find totals (including representing through bar models) • Recognise that combining groups of equal amounts can be done as repeated addition • Link repeated addition to multiplication number sentences and calculating the product in the 2, 5 and 10 times table • Calculate mathematical statements for multiplication statements within the 2, 5 and 10 times tables and write them using the multiplication (x) and equals (=) sign • Recall the multiplication facts for the 2, 5 and 10 times tables • Recognise odd and even numbers **Division (2 weeks)** • Recall the division facts for the 2, 5 and 10 times table • To know that equal sharing into groups of the same size is called division • Practically share a group of objects into smaller groups of equal size and write the corresponding division calculation • Write division number sentences using the ÷ symbol • Show that multiplication of 2 numbers can be done in any order and that division can not • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods. **Review Week (1 week)**	Equal groups, total, bar model, equal amounts, repeated addition, multiplication, groups of, multiple of, times, lots of, multiply, times tables, equals, odd, even, commutative Divide, divided by, divide into, sharing, equal groups of, shared between, division facts, arrays, repeated addition, bar model

Statistics (1 week) • Interpret data in a tally chart • Present data in the form of a tally chart • Interpret data simple pictograms • Present data in simple pictograms **Review and assess week 1 week** **Addition and subtraction - 2 weeks** • Use knowledge of tens and ones to add and subtracts numbers with tens and ones up to 20, using concrete and pictorial representations • Represent addition and subtraction calculations to 50 in number sentences **Geometry - properties of Shape (1 weeks)** • Recognise and name common 2d shapes rectangles, squares, circles and triangles, beginning to use the language associated with their properties (sides and corners) presented in different orientiations. • Recognise and name common 2d shapes rectangles, squares, circles and triangles, beginning to use the language associated with their properties (sides and corners)	**Statistics (1 week)** • Interpret data in a tally chart • Present data in the form of a tally chart • Interpret data simple pictograms • Present data in simple pictograms • Ask and answer simple questions by counting the number of objects in each category and sorting the category by numbers • Ask and answer simple questions about totalling and comparing categorical data. **Review and assess 1 week** **Addition and subtraction (2 weeks)** • Add numbers using concrete objects and pictorial representations, including 2, 2 digit numbers and 3, 1 digit numbers • Add numbers mentally including 2, 2 digit numbers and 3, 1 digit numbers • Subtract numbers using concrete objects and pictorial representations, including 2, 2 digit numbers and 3, 1 digit numbers • Subtract numbers mentally including 2, 2 digit numbers and 3, 1 digit numbers	Data, interpret, present, tally chart, pictograms, categories, sorting, totalling, amount, compare, difference. Add, plus, sum, more, total, altogether, subtract, less, difference, equals, parts, whole, altogether, bonds, relationship, partition, jump, pictorial, resources, commutative, equation, calculation,

• Know that rectangles, triangles, cuboids and pyramids are not always similar to one another.		
Summer Term	**Summer Term**	
Count to and across 100, forward and backwards, beginning with 0 or 1 or from any given number (2 weeks) • Count sets of objects reliably to 100 • Count forwards from any number within 100. • Count backwards from any number within 100 • Sequence numbers on a numberline within 100 • Given a number, identify one more and one less within 100 • Count in multiples of 10 up to 100 • Compare numbers using the language of more than, less than, most, least and equal to • Use the <> and = symbols to compare numbers up to 20 **Money (1 week)** • Recognise and know the value of different denominations of coins and notes **Fractions (2 week)** • Recognise and find and name a half as one of two equal parts of an object or shape • Recognise and find and name a half as one of two equal parts of a quantity • Recognise and find and name a quarter as one of four equal parts of an object or shape • Recognise and find and name a quarter as one of four equal parts of a quantity **Review week - 1 week**	**Money (2 weeks)** • Recognise and use symbols for pounds (£) and pence (p). • Count money (coins and notes) and combine amounts to make a particular value, progressing to working with pounds and pence. • Identify and find different combinations of coins that equal the same amounts of money. • Compare amounts of money. • Identify language in word problems which require addition or subtraction of amounts eg. total cost, altogether, how much more? • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. **Properties of shape (1 week)** • Use precise language to identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. • Know that a line of symmetry is a line between two halves. • Know that when something is folded on its line of symmetry, the two parts match exactly; the shape is symmetrical. • Compare and sort common 2-D shapes based on their properties and everyday objects. • Order and arrange combinations of mathematical objects eg. 2D shapes in patterns and sequences (geometry – position and direction).	Amount, total, pence, pound, coin, note, total cost, altogether, compare, more than, less than, equal to, change, pay, spent Properties, 2 dimensional, sides, corners, lines of symmetry, vertical line, halves, fold,

Geometry - Position and Direction (1 week) • Describe position using the language of next to, in front of, behind, to the left of, to the right of • Describe and understand half, quarter and 3 quarter turns **Time (1 week)** • Sequence events in chronological order using language of before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening • Recognise and use language relating to dates. , including days of the weeks, months and years • Tell the tome to the hour and half past the hour and draw the hands on a clock to show these times. • Use the language of quicker, earlier, later	**Fractions (2 weeks)** • Identify and recognise a whole and equal parts**.** • Recognise, find, name and write a half of a length, shape, set of objects or quantity. • Recognise, find, name and write a quarter of a length, shape, set of objects or quantity. • Recognise, find, name and write a quarter of a length, shape, set of objects or quantity. • Recognise, find, name and write three quarters of a length, shape, set of objects or quantity. • Recognise that $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent. • Write simple fractions of amounts e.g ½ of 6 = 3 • Know that a unit fraction is where the numerator is 1. • Know that that a whole can be split into a different number of equal parts and associate this with recognising unit fractions E.g. If a whole is split into 3 parts, 1 part = $\frac{1}{3}$ **Review week (1 week)** **Position and direction (1 week)** • Use mathematical vocabulary to describe position and direction e.g. to the left/right of, in the middle of, in one of the etc. • Use mathematical vocabulary to describe movement e.g. forwards, backwards, left and right. • Use mathematical vocabulary to describe movement in a straight line and • Recognise that clockwise and anticlockwise describes a turn (direction of rotation). • Describe turns in terms of clockwise and anti-clockwise and turns at right angles for quarter, half and three-quarter turns.	parts, match, compare Whole, part, deominator, numerator, half, quarter, third, three quarters, equivalent Left, right, forwards, backwards, in the middle of, in front of, next to, clockwise, anti-clockwise, right angle, quarter turn,

• Begin to measure and record time in hours, minutes and seconds and know whether the events are likely to last seconds, minutes, hours, days, weeks or months • Solve practical problems for time (including those which require addition and subtraction of numbers to 20) **Measures - Weight and capacity (2 weeks)** • Use balance scales to measure and compare the mass/weight of objects using non-standard units (e.g.cubes) • Describe capacity in terms of full/empty/half full • Compare capacity using the language of more than/less than by sight • Measure capacity using non-standard units such as spoons/glasses/bottles and compare the capacity of different containers by measuring	**Time (1 week)** • Tell and write the time to the hour, the half hour, including quarter past/to the hour. • Draw the hands on a clock face to show these times. • Tell and write the time to 5 minute intervals. • Compare and sequence intervals of time. • Know the number of minutes in an hour and number of hours in a day. **Measure - Weight, volume and temperature (2 weeks)** • Know that mass can be measured accurately by weighing (e.g. using balance/weighing scales). • Compare mass, using vocabulary of heaviest, lightest, heavier and lighter, greater than, less than and equals signs. • Know that a gram is a unit for measuring mass. • Know that a kilogram is a heavier unit than grams for measuring mass (and is used to measure heavier objects). • Choose and use appropriate standard units to estimate and measure mass (kg/g). • Know that volume can be measured accurately using measuring vessels/jugs, spoonfuls. • Compare volume, using vocabulary of most, least, how many 'spoonfuls', container A holds half as much as container B, greater than, less than and equals signs etc. • Know that millilitres is a unit for measuring volume. • Know that a litre is a larger unit than millilitres for measuring volume. • Choose and use appropriate standard units to estimate and measure volume (l/ml). • Know that temperature can be measured accurately using a thermometer in degrees. • To know that degrees is represented by the symbol ^{o}.	half turn, 3 quarter turn, rotate. Hour, minutes, half hour, quarter past, half past, quarter to, 5 minute intervals, sequence, days, weeks, months, years, minute hand, hour hand, seconds. Mass, balance, weight, weighing scales, lightest, heaviest, greater than, less than equal to, grams, kilograms, unit of measurements, Volume, vessels, jugs, spoonfuls, compare, greater than, less than, equal to, millilitres, litres

Review and assess (1 week) **Geometry - properties of shape (1 week)** • Recognise and name common 3-D shapes (e.g. cuboids including cubes, pyramids and spheres) • Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations. **Statistics (1 week)** • Interpret data in a block diagram. • Present data in the form of a block diagram. • Interpret data in a simple table. • Present data in the form of a simple table.	• Read thermometers and write temperatures in degrees. • Compare temperature, using vocabulary of highest, lowest, increase and decrease. • Choose and use appropriate standard units to estimate and measure volume (l/ml). **Review and assess (1 week)** **3D shapes (1 week)** • Know that a face is a flat surface on a 3D shape. • Know that each fact is a 2D shape. • Know that an edge is where two faces on a 3D shape meet. • Identify and describe the properties of 3-D shapes including the number of edges, vertices and faces. • Compare and sort common 3-D shapes and everyday objects based on their properties. • Identify 2-D shapes on the surface of 3-D shapes, (eg: a circle on a cylinder and a triangle on a pyramid). • Make patterns with 3D shapes. **Statistics (1 week)** • Interpret data in a block diagram. • Present data in the form of a block diagram. • Ask and answer simple questions by counting the number of objects in each category and sorting the category by numbers. • Ask and answer simple questions about totalling and comparing categorical data. • Interpret data in a simple table. • Present data in the form of a simple table. • Ask and answer simple questions by counting the number of objects in each category and sorting the category by numbers. • Ask and answer simple questions about totalling and comparing categorical data.	Thermometer, degrees, symbol, temperatures, highest, lowest, increase, decrease, 3 dimensional, faces, vertices, edges, meet, compare, sort, 2 dimensional face, sphere, cone, cube, cuboid, prism, cylinder, pyramid, patterns. Block diagram, axes, present, interpret, category, sort, totalling, categorical data, compare.

YEAR 2

Facts (declarative knowledge)	Processes (methods)
Number and Place value (3 weeks) • Know the numbers up to 100. • Know that numbers can be counted in tens (forward and backwards). • Know that numbers can be partitioned (decomposed and composed). • Know the <,> and = are signs used to compare. **Number and Place value review week (1 week)** **Addition and subtraction (5 weeks)** • Secure fluency in addition and subtraction facts within 10, through continued practice.	**Number and Place value (3 weeks)** • Count sets of objects reliably to 100 • Read and write numerals to 100 in numerals and words • Count forwards in steps 0 of 10 from any number, forwards and backwards • Recognise the place value of each digit in a two-digit number (tens and ones) • Identify, represent, partition and estimate numbers in different ways (up to 100). • Reason about the location of any two digit number e.g. compare and order numbers from 0 to 100, identifying the next and previous multiple of 10. • Use the <> and = symbols to compare numbers up to 100 **Addition and subtraction** • Secure fluency in addition and subtraction facts within 10, through continued practice.

• Recall addition and subtraction facts to 20 fluently. • Recall all number bonds to and within 10 • Know that numbers can be added and subtracted across 10: • Know facts within 20. • Know that adding and subtracting can be done using concrete objects and pictorial representations. • Know that addition of two numbers can be done in any order (commutative law). • Understand that subtraction cannot be done in any order. • Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?". • Recognise the inverse relationship between addition and subtractions **Review week - addition and subtraction (1 week)**	• Use addition and subtraction facts to 20 fluently (representing this is different ways for example part whole model, dienes, progressing to number sentences). • Use all number bonds to and within 10 to reason with and calculate bonds to and within 20, recognising other associated additive relationships. • Add and subtract across 10: • Use known facts within 20 to add and subtract numbers to 100. • Add numbers using concrete objects and pictorial representations, including 2 digit numbers and ones and two digit numbers and tens • Add and subtract within 100 by applying related 1-digit addition and subtraction facts: add and subtract **only ones or only tens** to/from a 2 digit number, before adding and **subtracting any 2 digit numbers**: -Add numbers mentally including 2 digit numbers and ones and two digit numbers and tens

Measurement - (2 week) • to know that length and height can be measured in centimetres • To know that a ruler can be used to measure in centimetres. • To know that length and height can be measured in metres when the object is longer or taller • Know the appropriate standard units to measure	-Subtract numbers using concrete objects and pictorial representations, including 2 digit numbers and ones and two digit numbers and tens -Subtract numbers mentally including 2 digit numbers and ones and two digit numbers and tens • Use the inverse relationship between addition and subtractions to check calculations and missing number problems (only within addition and subtraction calculations previously learnt) • Compare addition and subtraction number sentences, saying which answer is the biggest/smallest/equal to **Measurement - (2 week)** • Measure length of standard object in centimetres with a 30cm ruler • Measure length of standard object in metres using a metre rule/trundle wheels • Compare and order heights and lengths in any direction using < > and = to record the results • Decide on the most appropriate standard units to

and estimate lengths and height. **Autumn term review and assess (2 weeks)**	estimate and measure lengths and height • Compare and order lengths in any direction using < > and = to record the results.
Spring Term **Number, place value (1 week)** • Know that counting can involves steps of 5 from 0 forwards and backwards. • Know that counting can involve steps of 2 from 0 forwards or backwards **Multiplication (2 weeks)** • Recognise that combining groups of equal amounts can be done as repeated addition • Link repeated addition to multiplication number sentences and calculating the product in the 2, 5 and 10 times table • Recall the multiplication facts for the 2, 5 and 10 times tables • Know that numbers can be odd or even. **Division (2 weeks)** • To know that equal sharing into groups of the same size is called division	**Number, place value (1 week)** • Count in steps of 5 from 0 forwards and backwards. • Count in steps of 2 from 0 forwards or backwards **Multiplication (2 weeks)** • Make equal groups of 2, 5 and 10 and use these to find totals (including representing through bar models) • Calculate mathematical statements for multiplication statements within the 2, 5 and 10 time stables and write them using the multiplication (x) and equals (=) sign • Recognise odd and even numbers **Division (2 weeks)** • Practically share a group of objects into smaller groups of equal size and write the corresponding division calculation

• Know that the division symbol is ÷ • Recall the division facts for the 2, 5 and 10 times table • Know that multiplication of 2 numbers can be done in any order and that division cannot **Review Week (1 week)** **Statistics (1 week)** • Know that data can be represented in a tally chart and pictogram. **Addition and subtraction (2 weeks)** **Review and assess 2 weeks**	• Write division number sentences using the ÷ symbol • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods. Include relating grouping problems (where number of groups is unknown) to multiplication equations with a missing factor, and to division. **Statistics** • Interpret data in a tally chart • Present data in the form of a tally chart • Interpret data simple pictograms • Present data in simple pictograms • Ask and answer simple questions by counting the number of objects in each category and sorting the category by numbers • Ask and answer simple questions about totalling and comparing categorical data **Addition and subtraction (2 weeks)**

	• Add numbers using concrete objects and pictorial representations, including 2, 2 digit numbers and 3, 1 digit numbers • Add numbers mentally including 2, 2 digit numbers and 3, 1 digit numbers • Subtract numbers using concrete objects and pictorial representations, including 2, 2 digit numbers and 3, 1 digit numbers • Subtract numbers mentally including 2, 2 digit numbers and 3, 1 digit numbers
Summer term **Money (2 weeks)** • Recognise symbols for pounds (£) and pence (p). • Identify language in word problems which require addition or subtraction of amounts eg. total cost, altogether, how much more?	**Money (2 weeks)** • Use symbols for pounds (£) and pence (p). • Count money (coins and notes) and combine amounts to make a particular value, progressing to working with pounds and pence. • Identify and find different combinations of coins that equal the same amounts of money. • Compare amounts of money. • Solve simple problems in a practical context involving addition and subtraction of

Properties of shape (2 weeks) • Know and use precise language to identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. • Know that a line of symmetry is a line between two halves. • Know that when something is folded on its line of symmetry, the two parts match exactly; the shape is symmetrical. **Fractions (2 weeks)** • Identify and recognise a whole and equal parts**.** • Recognise and name a half, quarter or three quarters of a length, shape, set of objects or quantity. • Recognise that $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent. • Know that a unit fraction is where the numerator is 1. • Know that that a whole can be split into a different	money of the same unit, including giving change. **Properties of shape (2 weeks)** • Compare and sort common 2-D shapes by reasoning about similarities and differences in properties and everyday objects. • Order and arrange combinations of mathematical objects eg. 2D shapes in patterns and sequences (geometry – position and direction). **Fractions (2 weeks)** • Find and write a half, a quarter or three quarters of a length, shape, set of objects or quantity. • Write simple fractions of amounts e.g ½ of 6 = 3

number of equal parts and associate this with recognising unit fractions E.g. If a whole is split into 3 parts, 1 part = $\frac{1}{3}$ **Position and direction (1 week)** • Know that mathematical vocabulary can be used to describe position and direction e.g. to the left/right of, in the middle of, in one of the etc. • Know that mathematical vocabulary can be used to describe movement e.g. forwards, backwards, left and right. • Know that mathematical vocabulary can be used to describe movement in a straight line and • Recognise that clockwise & anticlockwise describes turn (direction of rotation). **Time (2 weeks)** • Know that telling the time can involve the mathematical vocabulary: half hour, including quarter past/to the hour, 5 minutes	**Position and direction (1 week)** • Use mathematical vocabulary to describe position and direction e.g. to the left/right of, in the middle of, in one of the etc. • Use mathematical vocabulary to describe movement e.g. forwards, backwards, left and right. • Use mathematical vocabulary to describe movement in a straight line and • Describe turns in terms of clockwise and anti-clockwise and turns at right angles for quarter, half and three-quarter turns. **Time (2 weeks)** • Tell and write the time to the hour, the half hour, including quarter past/to the hour. • Draw the hands on a clock face to show these times. • Tell and write the time to 5 minute intervals. • Compare and sequence intervals of time. **Weight, volume and temperature (2 weeks)**

• Know that there are two hands (one showing hour; one showing minutes) on a clock face • Know the number of minutes in an hour and number of hours in a day. **Weight, volume and temperature (2 weeks)** • Know that mass can be measured accurately by weighing (e.g. using balance/weighing scales). • Know that a gram is a unit for measuring mass. • Know that a kilogram is a heavier unit than grams for measuring mass (and is used to measure heavier objects). • Know the appropriate standard units to estimate and measure mass are (kg/g) • Know that volume can be measured accurately using measuring vessels/jugs, spoonfuls. • Know that millilitres is a unit for measuring volume. • Know that a litre is a larger unit than millilitres for measuring volume. • Choose and use appropriate standard units to	• Compare mass, using vocabulary of heaviest, lightest, heavier and lighter, greater than, less than and equals signs. • Choose and use appropriate standard units to estimate and measure mass (kg/g). • Compare volume, using vocabulary of most, least, how many 'spoonfuls', container A holds half as much as container B, greater than, less than and equals signs etc. • Choose and use appropriate standard units to estimate and measure volume (l/ml). • Read thermometers and write temperatures in degrees. • Compare temperature, using vocabulary of highest, lowest, increase and decrease. • Choose and use appropriate standard units to estimate and measure volume (l/ml).

estimate and measure volume are (l/ml). • Know that temperature can be measured accurately using a thermometer in degrees. • To know that degrees is represented by the symbol °. • Know that appropriate standard units to estimate and measure volume are (l/ml). **3D shapes (1 week)** • Know that a face is a flat surface on a 3D shape. • Know that each fact is a 2D shape. • Know that an edge is where two faces on a 3D shape meet. • Identify 2-D shapes on the surface of 3-D shapes, (eg: a circle on a cylinder and a triangle on a pyramid). **Statistics (1 week)** • Know that data can be presented in block diagrams. **Review and assess (1 week)**	**3D shapes (1 week)** • Identify and describe the properties of 3-D shapes including the number of edges, vertices and faces. • Compare shapes by reasoning about similarities and differences of properties; sort common 3-D shapes and everyday objects based on their properties. • Make patterns with 3D shapes. **Statistics (1 week)** • Interpret data in block diagrams. • Present data in block diagrams. • Ask and answer simple questions by counting the number of objects in each category and sorting the category by numbers • Ask and answer simple questions about totalling and comparing categorical data