Our School Ethos.

The curriculum for Key Stage 1 reflects the rapid pace of development expected in Mathematics during these two years. Therefore this Year 1 content may be taught at any point over this 2 year period. We also recognise that children will progress differently and therefore the content may be introduced during any of the terms of Year 1 when teachers deem children are ready for this. All children will move through the curriculum determined by school based and formal assessments, as appropriate to their level of ability but also with a view to their readiness to learn the skills. We have high expectations and aspirations for our children's Mathematics' skills. However some children will learn at different paces and may also need to revisit and recap learning to ensure it is embedded. **Therefore, some learning objectives will appear in more than one term, to reflect that children will be ready for these learning objectives at different times. A learning objective that has appeared on the previous term's planning with be indicated by the use of brackets. A Learning objective that is newly introduced will be written in bold text.** Learning objectives may also be repeated to check children have retained previous learning and are consistent. However, it remains the responsibility of the Class Teacher to ensure that all children are set appropriately challenging work that will enable them to make progress. Our children's well-being is important and it must be acknowledged that even with high expectations children develop differently. We are an inclusive school and respect all learning styles, knowing that one way does not fit all. We aim to provide a range of teaching approaches and methods.

Rights and Respecting – Link to Literacy

Article 1 Everyone under 18 has these rights.
Article 2 All children have these rights, no matter who they are, where they live, what their parents do, what language they speak, what their religion is, whether they are a girl or a boy, what their culture is, whether they have a disability, whether they are rich or poor. No child should be treated unfairly on any basis.
Article 3 All adults should do what is best for you. When all adults make decisions they should think about how their decisions will affect children (planning for and using the internet)
Article 12 You have the right to an opinion and for adults to listen and take it seriously.
Article 13 You have the right to find out things and share what you think with others by talking, drawing, writing or in any other way unless it harms or offends others. (e-safety)
Article 16 You have the right to privacy (e-safety)
Article 17 You have the right to get information that is important to your well-being from sources inc computers. Adults should make sure the information you are getting is not harmful and helps you to find the and understand the information you need. (Esafety)
Article 19 You have the right to be protected from being hurt or mistreated in body or mind. (Esafety)
Article 28 You have the right to a good quality education. You should be encouraged to go to school to the highest level you can.
Article 36 You have the right to protection from any kind of exploitation (Esafety)
Article 42 You have the right to know your rights

End of Year requirements from NC program of study.	**Year One Autumn Term**

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	**Recite number names in order from 0 to 10 or more forwards.** **Count backwards from 10.** **Count up to 10 objects reliably and begin to go beyond.** **Recognize that the number of objects does not change if the set is rearranged.** **Count on from any given number to 10.** **When shown a numeral up to 10, they count out that number.** **Estimate a number of objects up to 10, based on their experience of visual patterns and arrays of objects.** **Begin to use ordinal numbers.**
Count, read and write numbers to 100 in numerals.	**Count forwards and backwards in ones practically** **Read numerals to 10.** **Write numerals to 10.**
Read and write numbers from 1 to 20 in numerals and words.	**Read and write numbers from 0 to 10 in words.** **Correctly form and orientate all digits.** **Begin to correctly write teen numbers.**
Count in multiples of twos, fives and tens.	**Count on in tens from 0 to 100.** **Identify missing numbers in a sequence of 10s numbers forwards.** **Begin to count in steps of 2 from 0 to 20** **Identify missing numbers in a sequence of 2s numbers forwards.** **Begin to count in steps of 5 from 0 to 30.** **Identify missing numbers in a sequence of 5s number forwards.**
Given a number, identify one more and one less.	**Find the number that is one more or one less than a given number to 10, then 20.**
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.	**Use more to refer to addition and counting on.** **Use less to refer to subtraction and counting back.** **From two numbers, say which is bigger/more or smaller/less for numbers to 20 and then beyond.**
Read, write and interpret mathematical statements involving addition (+), subtraction (–) and	**Begin to read and write number sentences with the signs +, = -.** **Write own number sentences based on practical experiences.** **Record 'more' situation as an addition number sentence.**

equals (=) signs.	**Record 'less' situations as a subtraction number sentence.** **Use vocabulary add, plus, more.** **Use vocabulary take away, minus, less.** **'Tell a story' to match a number sentence.**
Represent and use number bonds and related subtraction facts within 20.	**Know number bonds to 5.** **Explore ways to make all numbers up to 5 by adding and subtracting within 10.** **Derive number bonds to 10.**
Add and subtract one-digit and two-digit numbers to 20, including zero.	**Add 2 single digit numbers practically by counting all.** **Add 2 single digit numbers practically by counting on.** **Begin to count on mentally.** **Add 2 single digit numbers by counting on using a number line.** **Record workings as an addition number sentence.** **Subtract 2 single digits numbers by practically taking away objects from a set.** **Subtract 2 single digit numbers practically by counting backwards.** **Subtract 2 single digit numbers by counting back on a number line.**
Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9.	**Solve addition word problems practically.** **Solve subtraction word problems practically.** **Write the number sentence needed.** **Solve addition missing box problems using numbers within 10.** **Solve subtraction missing box problems using numbers within 10.**
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	**To be taught in the Spring term.**
Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	**Find half of objects/shapes/ pictures.** **Practically find half of an even number of objects to 10.**

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	**To be taught in the Spring Term.**
Compare, describe and solve practical problems for: lengths and heights Measure and begin to record lengths and heights.	**Measure length by making direct comparisons between two objects.** **By comparing pairs of objects order two objects, then more than two objects.** **Begin to use uniform non-standard units to estimate and then measure length, i.e. cubes or art-straws that are all the same size.** **Use the vocab - long/short, longer/shorter, tall/short, double/half**
Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than] Measure and begin to record mass/weight.	**Measure weight by making direct comparisons between two objects, identifying which is heavier/lighter.** **By comparing pairs of objects order two objects then more than two objects.** **Use the vocab heavy/light/heavier/lighter.** **Begin to use uniform non-standard units to estimate and then measure weight.**
Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Measure and begin to record capacity and volume.	**Measure capacity by making direct comparisons between two objects, identifying which holds more/less.** **By comparing pairs of objects order two objects, then more than two objects.** **Begin to use uniform non-standard units to estimate and then measure capacity.** **Identify if an object is full/empty/half full/ nearly full/nearly empty.**
Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]. Measure and begin to record time (hours, minutes, seconds) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	**Count how many times they can perform an action in one minute.** **Read and write time to the hour.** **Begin to read and write time to the half hour.** **Identify the hour hand and the minute hand.** **Know there are sixty seconds in a minute.**

Recognise and know the value of different denominations of coins and notes.	**Use 1p coins or £1 to make totals.** **Recognise 1p and 2p coins.** **Use 1p/2p/5p coins (as appropriate) to make totals.** **Count totals made of 1p coins. Then with 2p/5p/10p coins.** **Use knowledge of counting in 1s, 2s, to support using money.** **To begin to make choices about how to spend money sensibly. (Economic Awareness)** **To begin to realise that money can be used for different purposes. (Economic Awareness)**
Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].	**Sequence daily events.** **Use vocabulary such as morning, afternoon and evening, today, yesterday and tomorrow.**
Recognise and use language relating to dates, including days of the week, weeks, months and years.	**Order the days of the week and learn that weekend days are Saturday and Sunday.** **Discuss the date each day.**
Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres.	**Use 2-D shapes and 3-D solids to build models, pictures and patterns.** **Name common 2D shapes including rectangles, squares, triangles and circles.** **Identify 2D shapes in the environment.** **Recognise and create repeating patterns with objects and shapes.**
Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	**To place objects above, below, to the right of and to the left of other objects and to use vocab top, middle and bottom.** **Use vocabulary on top of, next to, in, on above.** **Perform whole and half turns clockwise and anticlockwise.**

End of Year requirements from NC program of study.	**Year One Spring Term**
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	**Count in as many different contexts as possible, as far as they can towards one hundred.** **Count backwards from 20.** **Continue the count after a given sequence** **Count on from one number to another within 50.** **Estimate a number of objects to 20 that can be checked by counting.** **Work beyond numbers to 20.**
Count, read and write numbers to 100 in numerals.	**Read numerals to 50.** **Write numerals to 50**
Read and write numbers from 1 to 20 in numerals and words.	**Read and write numbers from 0 to 20 in words.** **Correctly write teen numbers.** **Learn to recognise the difference between '-ty' and '-teen' numbers. Read and write 'ty' and teen numbers accurately in numerals.**
Count in multiples of twos, fives and tens.	**Consolidate counting in steps of 2 from 0 to 20** **Identify missing numbers in a sequence of 2s numbers forwards and backwards.** **Identify odd and even numbers.** **Secure counting in steps of 10 from 0.** **Identify missing numbers in a sequence of 10s numbers forwards and backwards.** **Begin to count in steps of 10 from any given number.** **Use knowledge of counting in steps of 10 to find the number that is 10 more or less for multiples of 10.** **Begin to count in steps of 5 from 0 to 50, recognising the pattern of the digits.** **Identify missing numbers in a sequence of 5s numbers forwards and backwards.**
Given a number, identify one more and one less.	**Find the number that is one more or one less than a given number to 50.**
Identify and represent numbers using objects and pictorial representations including the	**From 2/3 numbers up to 50, say which is bigger/more or smaller/less.** **Order 2/3 random numbers up to 50 and beyond.** **Use practical apparatus to partition numbers into tens and units.**

number line, and use the language of: equal to, more than, less than (fewer), most, least.	**Use the vocabulary tens and units.** **Identify how many tens and units in a number to 20 (and beyond) using practical apparatus.**
Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.	**Know that addition can be done in any order.** **Begin to know that subtraction undoes addition.** **Record a problem using the +, − and = symbols.**
Represent and use number bonds and related subtraction facts within 20.	**Know number bonds to 10.** **Derive number bonds to 20.** **Explore ways to make all numbers up to 10 by adding and subtracting within 20.** **Use practical apparatus to learn doubles of numbers up to at least 5 + 5, then beyond, by making two sets of the same number.**
Add and subtract one-digit and two-digit numbers to 20, including zero.	**Add multiples of 10.** **Add 10 to any given number to 100 using place value knowledge.** **Subtract 10 from any given number to 100 using place value knowledge.** **Add 2 single digit numbers by counting on mentally.** **Subtract 2 single digit numbers by counting back mentally.** **Add two single digit numbers/a single digit and a two digit number by counting on using a number line.** **Subtract a single digit/ a two digit number from a two digit number by counting back on a number line.** **Recognise the effect of adding 0.**
Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9.	**Solve addition word problems by counting on from the larger number and by combining groups.** **Solve subtraction word problems by counting back.** **Choose whether a problem involves addition or subtraction.** (Write the number sentence needed.) **Represent number stories with number sentences.** **Solve addition missing box problems using numbers within 20.** **Solve subtraction missing box problems using numbers within 20.**
Solve one-step problems involving multiplication and division, by	**Count repeated groups of objects.** **Begin to record solutions as repeated addition. Draw pictures to represent this, including**

calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	**arrays** **Solve simple problems involving counting repeated groups** **Share objects between a given number.** **Recognise that sharing into two equal groups is the same as halving.** **Solve simple problems involving sharing between a given number.** **Share objects by putting into equal groups.** **Begin to record pictorially.**
Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	**Find half of even numbers to 10 and then 20.** **Learn halves of even numbers to 10.** (Consolidate finding half of a shape/object.) **Understand a half as 1 of two equal parts.** **Use $\frac{1}{2}$ to record a half.**
Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	**Find a quarter of a shape/ object/picture.** **Find a quarter of a quantity by sharing into four equal parts.** **Use $\frac{1}{4}$ to record a quarter.**
Compare, describe and solve practical problems for: lengths and heights Measure and begin to record lengths and heights.	**Understand the different between standard and non-standard units.** **Identify objects longer/shorter than 1 metre** **Use measuring equipment accurately.**
Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than] Measure and begin to record mass/weight.	**Understand the different between standard and non-standard units.** **Identify objects that weigh more/less than 1Kg.** **Use measuring equipment accurately.**
Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]	**Understand the different between standard and non-standard units.** **Identify containers that hold more/less than 1L.** **Begin to measure using litres.** **Use measuring equipment accurately.**

Measure and begin to record capacity and volume.	
Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]. Measure and begin to record time (hours, minutes, seconds) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	**Read and record the time to the hour and the half hour on a clock with hands.** **Identify the time one hour later/earlier to the o'clock.** **Measure time taken to complete an activity in seconds/minutes.** **Know there are sixty seconds in a minute and sixty minutes in an hour.**
Recognise and know the value of different denominations of coins and notes.	**Recognise coins to the value of 20p.** **Use 1p/2p/5p/10p coins (as appropriate) to make totals.** **Count totals made of 1p/ 2p/5p/10p coins.** **Use knowledge of counting in 1s, 2s,10s to support using money.**
Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].	**Use vocabulary such as before, after, next, first to order events.**
Recognise and use language relating to dates, including days of the week, weeks, months and years.	**Recite the months of the year.** **Identify the current year.**
Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids	**Consistently name and identify 2D shapes – rectangles, squares, triangles, circles.** **Begin to name and recognise 2D shapes – kites, pentagons, hexagons, semi-circles.** **Begin to name and identify 3D shapes – cuboids, including cubes, pyramids and spheres.** **Identify 2D and 3D shapes in the environment.** **Develop mental images of 2D shapes.** **Recognise 2D shapes in different orientations.**

(including cubes), pyramids and spheres.	**Identify a 2D shape by feel.** **Sort shapes into groups using given criteria.**
Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	**They turn to the left and they turn to the right.** **Use vocabulary below, right, left, next to, in front of, behind, underneath, on top, in between.** **Use positional language to describe movement. i.e. forwards, backwards, turn etc.** **Make whole, half and quarter turns clockwise and anticlockwise.**

End of Year requirements from NC program of study.	**Year One Summer Term**
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	**Count forwards to 100 from any given number and begin to go beyond.** **Count back from 100 and from any given 2-digit number.** **Count over a tens boundary.**
Count, read and write numbers to 100 in numerals.	**Read numerals to 100 and begin to go beyond.** **Write numerals to 100 and begin to go beyond.**
Read and write numbers from 1 to 20 in numerals and words.	(Consolidate reading and writing numbers from 0 to 20 in words.) (Correctly write teen numbers. Learn to recognise the difference between '-ty' and '-teen' numbers. Read and write 'ty' and teen numbers accurately in numerals.)

Count in multiples of twos, fives and tens.	**Count in steps of 2 to 20 forwards and begin to go beyond.** **Count in steps of 2 backwards from 20.** **Know that even numbers are counting in 2s.** (Secure counting in steps of 10 from 0 forwards and backwards.) **Count in steps of 10 from any given number.** (Use knowledge of counting in steps of 10 to find the number 10 more or less for any number, then a multiple of 10 more or less than any number.) **Count in steps of 5 from 0 to 100 recognising the pattern of the digits.**
Given a number, identify one more and one less.	**Find the number that is one more or one less than any given number to 100.**
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.	**From two (or more) numbers, say which is bigger or smaller (or inbetween) for numbers to 100 and then beyond.** **Order random numbers to 100 and begin to go beyond.** (Use practical apparatus to partition numbers up to 100 into tens and units.) **Identify how many tens and units a number to 100 (and beyond) has using practical apparatus.** **Record as number sentences.**
Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.	Taught in Spring term. (Consolidate and apply the knowledge that addition can be done in any order. Consolidate and apply the knowledge that subtraction undoes addition. Record a problem using the +, – and = symbols.)
Represent and use number bonds and related subtraction facts within 20.	**Know number bonds to 10 and 20.** **Explore ways to make all numbers up to 20 by adding and subtracting within 20.** **Use practical apparatus to learn doubles of numbers up to at least 10 + 10, by making two sets of the same number.**
Add and subtract one-digit and two-digit numbers to 20, including zero.	**Add a multiple of 10 to any given number to 100 using place value knowledge.** **Subtract a multiple of 10 from any given number to 100 using place value knowledge.** **Add two single digit numbers/a single digit and a two digit number by counting on using a number line.** **Subtract a single digit/ a two digit number from a two digit number by counting back on a number line.** **Begin to add two 2-digit numbers by adding the tens, then the units and recombining.**

	Add three single digit numbers.
Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 =? – 9.	(Solve addition word problems by counting on from the larger number and by combining groups.) (Solve subtraction word problems by counting back.) (Choose whether a problem involves addition or subtraction.) (Write the number sentence needed.) **Solve addition and subtraction problems involving money.** (Represent number stories with number sentences.) **Use practical apparatus and drawings to represent and solve addition and subtraction problem.**
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	**Solve multiplication problems by counting repeated groups of objects, using knowledge of counting in 2s, 5s or 10s.** **Count jumps of 2, 5, or 10 on a number line/100sq.** **Record pictorially and as repeated addition.** **Solve division problems by practically sharing objects between a given number.** **Solve division problems by practically sharing objects into equal groups.** **Solve division problems by using knowledge of counting in 2s, 5s and 10s.** **Record pictorially.**
Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	**Learn halves of even numbers to 20.** Ensure that LO from previous terms have been met.
Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	(Consolidate finding a quarter of a shape/ object/picture.) **Find 2/4 and $\frac{3}{4}$ of a shape/object/picture.** (Consolidate finding a quarter of a quantity by sharing into four equal parts.) **Understand that a quarter is one of 4.** **Find 2/4 and $\frac{3}{4}$ of a quantity.** **Recognise that 2/4 =1/2.**

Compare, describe and solve practical problems for: lengths and heights Measure and begin to record lengths and heights.	**Begin to measure in whole units of cm and m.** **Suggest suitable standard units to estimate and measure given objects.** **Begin to make realistic estimates of objects' length, width and height, using knowledge of standard units.** **Solve practical problems involving length, width, height.**
Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than] Measure and begin to record mass/weight.	**Begin to measure in whole units of g and Kg.** **Suggest suitable standard units to estimate and measure given objects.** **Begin to make realistic estimates of objects' weight, using knowledge of standard units.** **Solve practical problems involving weight.**
Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Measure and begin to record capacity and volume.	**Begin to measure in whole units of l.** **Suggest suitable standard units to estimate and measure given objects.** **Begin to make realistic estimates of objects' capacity, using knowledge of standard units.** **Solve practical problems involving capacity.**
Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]. Measure and begin to record time (hours, minutes, seconds) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	(Consolidate reading and writing the time to the hour and the half hour on a clock with hands.) **Begin to read and write the time to quarter past the hour.** (Identify the time one/two etc. hour(s) later/earlier to the o'clock) **Make sensible estimates of time taken to complete an activity, selecting suitable units (seconds, minutes, hours)**
Recognise and know the value of different denominations of coins and notes.	**Recognise coins to the value of £1.** **Use 1p/2p/5p/10p/20p coins (as appropriate) to make totals to £1.** **Count totals made of 1p/ 2p/5p/10p/20p coins.** (Use knowledge of counting in 1s, 2s, 5s and10s to support using money.)

Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].	Ensure LO from previous terms are secure.
Recognise and use language relating to dates, including days of the week, weeks, months and years.	Ensure LO from previous terms are secure.
Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres.	**Consistently name and identify 2D shapes – rectangles, squares, triangles, circles, kites, pentagons, hexagons, semi-circles.** **Name and identify 3D shapes – cuboids, including cubes, pyramids and spheres, cones, prisms, including cylinders.** (Identify 2D and 3D shapes in the environment.) **Develop mental images of 2D and 3D shapes.** (Recognise 2D shapes in different orientations.) **Identify a 2D shape or 3D solid by feel.** **Sort shapes into groups using given and own criteria.**
Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	**Make whole, half, quarter and three quarter turns.** **Use vocab left and right, around, near, close and far, up and down, inside and outside.** **Describe the route through a simple maze.** **Program a simple floor robot to follow a route that is marked on the floor, using previous moves and 'trial and improvement' to estimate how many 'robot steps' are needed.**

LIFE SKILLS

- Say one thing they are pleased with in their learning. With help begin to recognise their achievements.
- I am beginning to think about how to improve my own work.
- To know the next step to improve their learning.
- To begin to say what they found challenging in their work.
- Record how they feel after their learning in a manner suggested by class teacher.
- Continue to explain how they solved a problem to a peer.
- Tell a peer something positive about their strategy.

- I work with a range of children suggested by an adult.
- I work with others towards a goal that has been suggested.
- I listen to others.
- I am prepared to put forward my ideas in a group and to the class.
- I can make sure everyone in a group gets to participate.
- I know that some people think differently to me.
- I am beginning to reach agreements.

I keep focused on a task I use the resources I have been given to complete a task. I am prepared to put forward my ideas or answers in a small group I think about risks and try to not let this put me off having a go

I try alternative or different approaches if they are suggested. I respond to ideas, tasks and problems. I make links between ideas I have some imaginative ideas I organise information in ways suggested by the teacher I answer different types of questions I discover some connections through play and experimentation. I try alternative or different approaches if they are suggested