Curriculum Map for Year 1 2018-2019

WITH FLUENCY, REASONING, PROBLEM SOLVING

Autumn Term 14 weeks 6 + 8		Spring Term 12 weeks 6 + 6		Summer Term 12 weeks 5 + 7	
2 weeks	The number system	3 weeks	Place value and the number system	2 weeks	Place value and the number system
2 weeks	Shape	2 weeks	Calculating + and – Geometry	2 weeks	Calculating + and -
2 weeks	Calculating + and – Additive Thinking mental strategies	1 week	Geometry	1 week	Geometry
HALF TERM		HALF TERM		HALF TERM	
2 weeks	The number system	2 weeks	Measure – time and money	2 weeks	Calculating x and /
3 weeks	Calculating + and – Additive Thinking mental strategies	2 weeks	Place value and the number system	1 week	Fractions
				1 week	Measure
2 weeks	Fractions	2 weeks	Measure	2 weeks	Place value and the number system
1 week	Geometry – Position and Direction			1 week	Calculating + and -

Year 1 Curriculum Map

AUTUMN TERM

Week	Objective	
Aut 1 **1** **2**	**The number system** ·count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ·count, read and write numbers to 100 in numerals ·count in multiples of twos, fives and tens ·given a number, identify one more and one less ·identify and represent numbers using objects and pictorial representations including the number line · use the language of: equal to, more than, less than (fewer), most, least ·read and write numbers from 1 to 20 in numerals and words Have a number of the day or few days and make a 'number table' in the classroom showing lots of different representations of the number of the day. Numbers 5-10 need more focus than 1-4. Develop children's ability to subitise using dice and dominoes.	Start with 0-10, wait until chn are fluent / confident before moving on to larger numbers. Explore the story of each number from 1-20 using different representations: counters, dominoes, straws, pegs, Numicon, Cuisenaire and bar modelled whole-part relationships. Plat games such as ping-pong so that children can memorise the facts. Ten-frames are a key representation for pairs (or three numbers) which add to ten. Big emphasis of bonds to 10 and play games like ping pong which help to memorise bonds to 10. Use Numicon activities from teaching guides to match objectives. Teens numbers are a huge focus in this unit. Investigate teen numbers and how they are ten and 1, ten and 2 etc. show this with Numicon tiles, Cuisenaire, base ten and place value cards. Really go deep on this and ensure that children are not writing 14 and 41 because of how the number 'sounds'. This is a big deal. Understanding the partitioning of teens numbers is a crucial step. Go over it in as many ways as possible. Place teens numbers on a number line, matching with Numicon tiles. Number tracks are the representation that children will be used to from Reception and it is a big leap to understanding number lines. Placing numbers on a number line and finding one more and one less discourages counting from 1. Don't rush ordering and placing teens numbers. Compare quantities (i.e. Dots) and numbers using inequality symbols <> and =. These symbols are very important to understand. The = symbol should be read as 'is equivalent to' 'is equal to' 'is the same as' or 'balances with'. Where it is placed in an equation needs to be varied so children get used to this and never think of it as meaning 'the answer is'. Ensure chn are USING and APPLYING these skills in a range of contexts – use Testbase for ideas of ways you can structure questions / problems / puzzles. Use games and activities that allow the same objective to be repeated in different ways – repetition should lead to fluency – dice, number cards. For high attainers, don't work on larger and larger numbers – ensure depth of understanding through applying and manipulating numbers https://www.ncetm.org.uk/resources/42455
Aut 1 **3** **4**	**Geometry - Shape** ·recognise and name common 2-D and 3-D shapes	Show chn that rectangles, triangles, cuboids and pyramids are not always similar to each other. Questions such as "Why is this NOT a triangle?" when holding up a square to encourage reasoning. Chn need to use and apply this knowledge – not just count sides / faces etc Start using visualisation activities. Look at, sort and notice the properties of 2-D shapes at different orientations and of different sizes. Children must get the hang not just of the names but of the properties starting in Y1 with sides and corners (vertices!). What are the sides like? Curved or straight? How many sides are there? Examine how 3D shapes have faces, edges and corners (vertices). Count these properties. Use nets to explore which 2D shapes define their faces. Can you spot 3D shapes in every-day life?

		https://www.ncetm.org.uk/resources/42821
Aut 1 **5** **6**	**Calculating + and –** ·read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs ·represent and use number bonds and related subtraction facts within 20 ·add and subtract one-digit and two-digit numbers to 20, including zero ·solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations · solve missing number problems such as 7 = ☐ – 9. Play games such as Totality and Don't roll a 6! And be explicit about which facts you could use to add without counting on in ones. Find rules and missing numbers in additive sequences. Doubling numbers to 10 and halving numbers to 20; examine this inverse relationship.	*** see Camden Think Piece – Sum It Up! Fluency in Addition and Subtraction Facts*** **Resources in Maths folder and JPD Additive Thinking google drive (might need to paste in goo.gl/iVGCSf)** Assess children using grid and see what children might already be secure with. Teach gaps from year 1strategies in the order listed in the resources. Lots of visuals and then supporting games and quizzes are in the google drive folder and in the maths folder under Additive Thinking Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than Pupils memorise and reason with number bonds to 10 and 20 in several forms (for example, 9 + 7 = 16; 16 – 7 = 9; 7 = 16 – 9). They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related operations. Link addition and subtraction from outset – e.g. 4 people at my house, 6 people arrive, now there 10 then the 6 people go home, how many left? Use of concrete apparatus / real life contexts initially. Allow chn to represent in their own way initially, for example pictorially and to experiment with how they record / use recordings to help them calculate. Chn need to be starting to memorise number bonds. High attaining chn do not need to pushed onto higher and higher numbers – they need to be secure with numbers up to 20. https://www.ncetm.org.uk/resources/42522 It might seem like an important stage for children to count on from a number in order to add. In the previous unit, children will have placed numbers on a line and counted on 1more or back 1 less. Starting with a larger number and counting on in 'hops' will become important for bridging ten in the Spring but for now, **the key is to calculate, not count on in 1s.** If children are going right back to 1 to add, further work needs to be done on understanding a number's cardinal place value. From the previous unit of work, children should be becoming more secure with the 'story of' numbers up to 20, and finding one more or one less than numbers. This has to be the foundation for + and -, and, again, if children are not secure, more work on the number system needs to be continued. Work within the 'story of' numbers to 20, modelling whole-part relationships with Numicon, Ten Frames and Cuisenaire rods (where white =1) and then draw pictorially as bar models. Write addition and subtraction number sentences (equations) e.g. part + part = whole; whole – part = part so 5 + 6 = 11; 6 + 5 = 11; 11 – 6 = 5 and 11 – 5 = 6 Bonds to 10 are crucial, but bonds to other numbers from 2-9 are also really important. This unit of work will be about using these bonds to calculate up to 20 e.g. (11 + 9 = 20 because I know 1 + 9 = 10) some children might be able to go beyond (34 + 6 = 40 because I know 4 + 6 = 10).

		Do lots of work to make connections from work on place value to the rest of the number system 'if I know… I know…' e.g. If I know 5 + 5= 10, 5 + 6 = 11; If I know 4 + 6 = 10, 4 + 7 must = 11. There are other links to be made using procedural variation: 4 + 6 = 10, 14 + 6 = 20, 24 + 6 = 30. Again, model these whole-part relationships using Numicon, Ten Frames and Cuisenaire rods (where white = 1) and then draw pictorially as bar models. Stress that addition can be done in any order (commutativity) so when solving 5 + 4 + 5 we could add 5 and 5 first, making 10, then add 4. Write calculations horizontally) and tell children to discuss the numbers in relation to each other. Are they far apart or close together? Which is the biggest? Smallest? Which number should we begin with? What 'linking thinking' can we do? <u>Strategies to be gradually introduced to get children calculating, not counting:</u> -Quick adds which do not involve bridging 10 e.g. 20 + 7 then 23 + 6 'because I know 3 + 6 = 9' -Quick subtractions e.g. 20 – 7 must be 13 because 10 – 7 = 3. Use concrete manipulatives, the number line image and whole/part models to support this. -Adding strings of numbers by making bonds or finding doubles (law of commutativity explored and flexibility encouraged e.g. we would do 7 + 5 + 3 by adding 7 and 3 to make 10 then 5 more is 15). -Add or subtract 10 to two digit numbers using spider counting (reinforced with Numicon tiles as concrete) and multiples of 10. Can any children add nearly numbers such as 9 by adding 10 and subtracting 1? The 100 square is the key image for this. Solve very simple one step word problems that require mental addition and subtraction using strategies taught. Check subtractions with the inverse. Write calculations in different ways and explore these using Numicon and balance scales e.g. 13 = ? + 4 ; 3 + 5 = ? – 2; and 2 + 5 > ? - 2
HALF TERM		

Year 1 Curriculum Map

Aut 2 **1** **2**	**The number system** ·count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ·count, read and write numbers to 100 in numerals ·count in multiples of twos, fives and tens ·given a number, identify one more and one less ·identify and represent numbers using objects and pictorial representations including the number line · use the language of: equal to, more than, less than (fewer), most, least ·read and write numbers from 1 to 20 in numerals and words **Count in multiples of twos, fives and tens.** Halving (this supports number line work by estimating where half way is). Discuss finding 'half of' the number line and 'half way between' two points etc.	Start with 0-10, wait until chn are fluent / confident before moving on to larger numbers. Explore the story of each number from 1-20 using different representations: counters, dominoes, straws, pegs, Numicon, Cuisenaire and bar modelled whole-part relationships. Plat games such as ping-pong so that children can memorise the facts. Ten-frames are a key representation for pairs (or three numbers) which add to ten. Big emphasis of bonds to 10 and play games like ping pong which help to memorise bonds to 10. Use Numicon activities from teaching guides to match objectives. Teens numbers are a huge focus in this unit. Investigate teen numbers and how they are ten and 1, ten and 2 etc. show this with Numicon tiles, Cuisenaire, base ten and place value cards. Really go deep on this and ensure that children are not writing 14 and 41 because of how the number 'sounds'. This is a big deal. Understanding the partitioning of teens numbers is a crucial step. Go over it in as many ways as possible. Place teens numbers on a number line, matching with Numicon tiles. Number tracks are the representation that children will be used to from Reception and it is a big leap to understanding number lines. Placing numbers on a number line and finding one more and one less discourages counting from 1. Don't rush ordering and placing teens numbers. Compare quantities (i.e. Dots) and numbers using inequality symbols <> and =. These symbols are very important to understand. The = symbol should be read as 'is equivalent to' 'is equal to' 'is the same as' or 'balances with'. Where it is placed in an equation needs to be varied so children get used to this and never think of it as meaning 'the answer is'. Ensure chn are USING and APPLYING these skills in a range of contexts – use Testbase for ideas of ways you can structure questions / problems / puzzles. Use games and activities that allow the same objective to be repeated in different ways – repetition should lead to fluency – dice, number cards. For high attainers, don't work on larger and larger numbers – ensure depth of understanding through applying and manipulating numbers https://www.ncetm.org.uk/resources/42455
Aut 2 **3** **4** **5**	**Calculating + and –** ·read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs ·represent and use number bonds and related subtraction facts within 20 ·add and subtract one-digit and two-digit numbers to 20, including zero ·solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations · solve missing number problems such as 7 = ☐ – 9.	*** see Camden Think Piece – Sum It Up! Fluency in Addition and Subtraction Facts*** **Resources in Maths folder and JPD Additive Thinking google drive (might need to paste in goo.gl/iVGCSf)** Assess children using grid and see what children might already be secure with. Teach gaps from year 1strategies in the order listed in the resources. Lots of visuals and then supporting games and quizzes are in the google drive folder and in the maths folder under Additive Thinking Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than Pupils memorise and reason with number bonds to 10 and 20 in several forms (for example, 9 + 7 = 16; 16 – 7 = 9; 7 = 16 – 9). They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related operations. Link addition and subtraction from outset – e.g. 4 people at my house, 6 people arrive, now there 10 then the 6 people go home, how many left? Use of concrete apparatus / real life contexts initially. Allow chn to represent in their own way initially, for example pictorially and to experiment with how they record / use recordings to help them calculate. Chn need to be starting to memorise number bonds.

	Play games such as Totality and Don't roll a 6! And be explicit about which facts you could use to add without counting on in ones. Find rules and missing numbers in additive sequences. Doubling numbers to 10 and halving numbers to 20; examine this inverse relationship.	High attaining chn do not need to pushed onto higher and higher numbers – they need to be secure with numbers up to 20. https://www.ncetm.org.uk/resources/42522 It might seem like an important stage for children to count on from a number in order to add. In the previous unit, children will have placed numbers on a line and counted on 1more or back 1 less. Starting with a larger number and counting on in 'hops' will become important for bridging ten in the Spring but for now, **the key is to calculate, not count on in 1s.** If children are going right back to 1 to add, further work needs to be done on understanding a number's cardinal place value. From the previous unit of work, children should be becoming more secure with the 'story of' numbers up to 20, and finding one more or one less than numbers. This has to be the foundation for + and -, and, again, if children are not secure, more work on the number system needs to be continued. Work within the 'story of' numbers to 20, modelling whole-part relationships with Numicon, Ten Frames and Cuisenaire rods (where white =1) and then draw pictorially as bar models. Write addition and subtraction number sentences (equations) e.g. part + part = whole; whole – part = part so 5 + 6 = 11; 6 + 5 = 11; 11 – 6 = 5 and 11 – 5 = 6 Bonds to 10 are crucial, but bonds to other numbers from 2-9 are also really important. This unit of work will be about using these bonds to calculate up to 20 e.g. (11 + 9 = 20 because I know 1 + 9 = 10) some children might be able to go beyond (34 + 6 = 40 because I know 4 + 6 = 10). Do lots of work to make connections from work on place value to the rest of the number system 'if I know… I know…' e.g. If I know 5 + 5= 10, 5 + 6 = 11; If I know 4 + 6 = 10, 4 + 7 must = 11. There are other links to be made using procedural variation: 4 + 6 = 10, 14 + 6 = 20, 24 + 6 = 30. Again, model these whole-part relationships using Numicon, Ten Frames and Cuisenaire rods (where white = 1) and then draw pictorially as bar models. Stress that addition can be done in any order (commutativity) so when solving 5 + 4 + 5 we could add 5 and 5 first, making 10, then add 4. Write calculations horizontally) and tell children to discuss the numbers in relation to each other. Are they far apart or close together? Which is the biggest? Smallest? Which number should we begin with? What 'linking thinking' can we do? <u>Strategies to be gradually introduced to get children calculating, not counting:</u> -Quick adds which do not involve bridging 10 e.g. 20 + 7 then 23 + 6 'because I know 3 + 6 = 9' -Quick subtractions e.g. 20 – 7 must be 13 because 10 – 7 = 3. Use concrete manipulatives, the number line image and whole/part models to support this. -Adding strings of numbers by making bonds or finding doubles (law of commutativity explored and flexibility encouraged e.g. we would do 7 + 5 + 3 by adding 7 and 3 to make 10 then 5 more is 15). -Add or subtract 10 to two digit numbers using spider counting (reinforced with Numicon tiles as concrete) and multiples of 10. Can any children add nearly numbers such as 9 by adding 10 and subtracting 1? The 100 square is the key image for this. Solve very simple one step word problems that require mental addition and subtraction using strategies taught. Check subtractions with the inverse. Write calculations in different ways and explore these using Numicon and balance scales e.g. 13 = ? + 4 ; 3 + 5 = ? – 2; and 2 + 5 > ? - 2

Year 1 Curriculum Map

Aut 2 **6** **7**	**Fractions** ·recognise, find and name a half as one of two equal parts of an object, shape or quantity ·recognise, find and name a quarter as one of four equal parts of an object, shape or quantity Count in halves up to 10, starting from any number using a counting stick. Find rules and missing fractions in sequences. Rehearse doubles and halves to 20.	Pupils are taught half and quarter as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. For example, they could recognise and find half a length, quantity, set of objects or shape. Pupils connect halves and quarters to the equal sharing and grouping of sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole. Lots of different concepts of half to be dealt with: Half of an object or shape Half of an amount – links with sharing between 2 Halving as an operation https://www.ncetm.org.uk/resources/42627 *NB. Although this document shows fractions like this ½ or ¾ it is MUCH better for you to write your fractions by hand or on a smart board so that the denominator is below not beside the numerator.* ***Recognise, find and name a half as one of two equal parts of an object, shape or quantity (fractions of shapes)*** Explore equal and unequal pieces of shapes, referring to the previous unit of work on geometry. Really emphasise that pieces must be equal and they are equal parts of a whole. Discuss what our 'whole' is. Tell them a shape is 1/2 and then get them to draw the rest. Focus on the denominator as representing the parts the whole is divided into. Keep the numerators as one at the beginning (unit fractions). Show 1/2 represented in different ways. You might even explore its equivalence with 2/4 of a shape. Ensure the shapes are different! Show them objects cut into 2 but ones which are not halves because not equal. Can the children find different ways of colouring exactly half of square? Can you find half of my cubes? Half of my water? Try paper folding and building a fraction wall for the half and quarter family. If when we have 2 equal parts we call one of them 1/2 , how might we write our fraction if we have one of 4 equal parts? We call this a quarter! Label shapes that have ¼ shaded. Use fraction cards to support the very beginnings of equivalence between ½ and 2/4 . https://www.ncetm.org.uk/resources/43609 ***Recognise, find and name half as one of two equal parts*** Count in fraction steps of halves on your counting stick, showing pictorial representations to support understanding. At first you might count in physical objects e.g. 'half an apple, one whole apple, one and a half apples, two apples…. Etc.' Discuss how we can write the fraction half as ½. The numerator shows us how many equal parts we have… 1/2 2/2 ('One whole!') 1 ½, 2 wholes, 2 1/2 , 3 wholes etc. Discuss how we can write the fraction quarter as 1/4. The numerator shows us how many equal parts we have. Give them opportunities to label fractional steps on a number line, modelled by your counting stick. Spend time exploring the meaning of 2/4 and perhaps its equivalence to ½. Spend even longer exploring ¾ and what the 3 signifies.

Year 1 Curriculum Map

Aut 2 **8**	**Geometry - Position and Direction** ·describe position, direction and movement, including whole, half, quarter and three-quarter turns	Pupils use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face. Use both real life and on paper situations. https://www.ncetm.org.uk/resources/42879 *GARDEN*

Year 1 Curriculum Map

SPRING TERM

Week	**Objective**	
Spr 1 **1** **2** **3**	**Place value and the number system** ·count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ·count, read and write numbers to 100 in numerals ·count in multiples of twos, fives and tens ·given a number, identify one more and one less ·identify and represent numbers using objects and pictorial representations including the number line · use the language of: equal to, more than, less than (fewer), most, least ·read and write numbers from 1 to 20 in numerals and words	https://www.ncetm.org.uk/resources/42455 Review the 'story of' numbers from the Autumn term, particularly teens numbers. Extend this to partition all two digit numbers using Numicon tiles, base ten and place value cards. Place numbers on number lines and discuss their relative value and size. Fill in missing numbers on number lines. Which is the nearest multiple of 10? At EP we call them café numbers. How far to the nearest café? Children should begin to represent two digit numbers (tens and ones) in different ways, using Numicon, straws, ten frames, place value cards etc. They need to understand at this point that if we add tens, the ones digit doesn't change! Explore how a 100 square is just a number track chopped up into 10s. Children can create 100 squares in this way. Do activities where children fill in parts of empty 100 squares and count on or back in 1s or 10s from any number. Represent this with Numicon tiles, base ten or place value counters too to show how the 10s digit is the bit that changes, not the ones digit. At EP we call this spider counting. Begin to forge connections from these foundations to the rest of the number system 'if I know… I know…' e.g. If I know 1 + 2 = 3 then I know 21 + 2 = 23. If I know 4 + 6 = 10, 24 + 6 = 30. If I know 5 + 5= 10, 5 + 6 = 11 Explore the idea of = as equivalence and balance using empty box partitions, Numicon tiles in balance scales and placing the = symbol in different places in equations. As well as making connections to solve addition problems, children should solve inequality problems, equivalence/ balance problems and empty box problems e.g. 12 = ? + 5 (don't always use number bonds to 10 as they're too familiar with them!), is 4 + 10 > or < than 11 + 4. Create questions like this which draw attention to the underlying structure and place value of the digits. Give children digit cards to place to complete equations and inequalities. They should also be able to order all numbers to 100 and say which are bigger and smaller. Ask questions such as 'how many 1s in 10?' to open up discussion and reasoning.

Year 1 Curriculum Map

Spr 1 **4** **5**	**Calculating + and –** ·read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs ·represent and use number bonds and related subtraction facts within 20 ·add and subtract one-digit and two-digit numbers to 20, including zero ·solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations · solve missing number problems such as 7 = ☐ – 9. Play games such as Totality and Don't roll a 6! And be explicit about which facts you could use to add without counting on in ones. Find rules and missing numbers in additive sequences. Doubling numbers to 10 and halving numbers to 20; examine this inverse relationship.	* Keep working on Additive Thinking strategies and recall (see Autumn resources) * Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than Pupils memorise and reason with number bonds to 10 and 20 in several forms (for example, 9 + 7 = 16; 16 – 7 = 9; 7 = 16 – 9). They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related operations. Link addition and subtraction from outset – e.g. 4 people at my house, 6 people arrive, now there 10 then the 6 people go home, how many left? Use of concrete apparatus / real life contexts initially. Allow chn to represent in their own way initially, for example pictorially and to experiment with how they record / use recordings to help them calculate. Chn need to be starting to memorise number bonds. High attaining chn do not need to pushed onto higher and higher numbers – they need to be secure with numbers up to 20. https://www.ncetm.org.uk/resources/42522 From earlier in the term, children should be becoming more secure with the 'story of' numbers up to 20, and finding one more or one less than numbers. This has to be the foundation for + and -, and, again, if children are not secure, more work on the number system needs to be continued. Autumn review: ensure that children are secure with the concepts introduced in Autumn. Begin slowly with the concept of difference, using known bonds. E.g. which numbers have a difference of 1 or 2? Use Numicon tiles to show 'difference' and then pictorial representation as a bar model showing whole-part relationships. Find the difference on a number line by counting up or, preferably, using known number facts to calculate. Rows of cubes could be compared to show whole-part relationships and 'difference' too. NB numbers that are close together lend themselves better to 'find the difference' and numbers that are far apart lend themselves to 'take away'. Children need to spend lots of time (years!) understanding these concepts and your calculations need to be intelligently designed to suit one strategy at a time before allowing the children to choose which is best. Solve very simple one step word problems that require mental addition and subtraction using strategies taught. Check subtractions with the inverse. Write calculations in different ways and explore these using Numicon and balance scales e.g. 13 = ? + 4 ; 3 + 5 = ? – 2; and 2 + 5 > ? – 2

Year 1 Curriculum Map

Spr 1 **6**	**Geometry** ·describe position, direction and movement, including whole, half, quarter and three-quarter turns ·recognise and name common 2-D and 3-D shapes ** Second week of unit in Summer term so not all needs to be completed	Pupils use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face. Chn need to use and apply this knowledge – not just count sides / faces etc but use reasoning and sorting activities. Start using visualisation activities. **Second week of unit in Summer term so not all needs to be completed this week** *GARDEN* https://www.ncetm.org.uk/resources/42821 https://www.ncetm.org.uk/resources/42879 Show chn that rectangles, triangles, cuboids and pyramids are not always similar to each other. Questions such as "Why is this NOT a triangle?" when holding up a square to encourage reasoning. Chn need to use and apply this knowledge – not just count sides / faces etc Start using visualisation activities. Look at, sort and notice the properties of 2-D shapes at different orientations and of different sizes. Children must get the hang not just of the names but of the properties starting in Y1 with sides and corners (vertices!). What are the sides like? Curved or straight? How many sides are there? Examine how 3D shapes have faces, edges and corners (vertices). Count these properties. Use nets to explore which 2D shapes define their faces. Can you spot 3D shapes in every-day life?
HALF TERM		
Spr 2 **1** **2**	**Measure – time and money** ·measure and begin to record time (hours, minutes, seconds) ·compare, describe and solve practical problems for time ·sequence events in chronological order using language ·recognise and use language relating to dates, including days of the week, weeks, months and years ·tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. ·recognise and know the value of different denominations of coins and notes	Lots of use of apparatus – link with role play areas – shop / cooking. Adults modelling correct vocabulary and language at all times. Language: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. https://www.ncetm.org.uk/resources/42711 ***Recognise and use language relating to dates, including the days of the week, weeks, months and years.*** Use time lines, placing days of the week or months of the year in order, starting in different places. Chant these at any opportunity. Use a time line to place times of the day including O'clock, and half past the hour. Link to fractions work in the Autumn and Spring. ***Tell the time to the hour and half past the hour and draw hands on the clock face to show these times.*** Use an analogue clock to show the hour hand and how it moves slowly all the time. Then introduce the minute hand. See if they can estimate one minute closing their eyes and putting their hand up when they think a minute has passed. Talk about how there are 60 minutes in the hour and our clocks are marked in 5 minutes. 15 minutes = quarter past, 30 minutes = half past and 45 minutes = quarter to the next hour. Use the language 'past' and 'to' and when we use these different words.

	Find one more or one less day or hour on a time line. Place days of the week or some of these words in order on a 'time line', starting from different places. Recall and use addition and subtraction facts for numbers to 20 fluently. Count in 5s round a clock face to 60 minutes. Count in steps of 5p, 20p and 10p etc. to support money work. Rehearse number bonds to 100	***Recognise and know the value of different denominations of coins*** Consider the big step in understanding that a coin's physical size does not give us a clue about its value; the place value is implicit! Children who count all coins as 'one' indiscriminately have not got a secure enough understanding value yet and need to add 1ps only. The NC does not say Y1 needs to add coins but for children who understand the implicit value of different coins, explore adding 10ps and 1ps to link to work on place value. Explore adding small amounts of 1ps 2ps and 5ps.
Spr 2 **3** **4**	**Place value and the number system** ·count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ·count, read and write numbers to 100 in numerals ·count in multiples of twos, fives and tens ·given a number, identify one more and one less ·identify and represent numbers using objects and pictorial representations including the number line · use the language of: equal to, more than, less than (fewer), most, least ·read and write numbers from 1 to 20 in numerals and words	https://www.ncetm.org.uk/resources/42455 Review the 'story of' numbers from the Autumn term, particularly teens numbers. Extend this to partition all two digit numbers using Numicon tiles, base ten and place value cards. Place numbers on number lines and discuss their relative value and size. Fill in missing numbers on number lines. Which is the nearest multiple of 10? At EP we call them café numbers. How far to the nearest café? Children should begin to represent two digit numbers (tens and ones) in different ways, using Numicon, straws, ten frames, place value cards etc. They need to understand at this point that if we add tens, the ones digit doesn't change! Explore how a 100 square is just a number track chopped up into 10s. Children can create 100 squares in this way. Do activities where children fill in parts of empty 100 squares and count on or back in 1s or 10s from any number. Represent this with Numicon tiles, base ten or place value counters too to show how the 10s digit is the bit that changes, not the ones digit. At EP we call this spider counting. Begin to forge connections from these foundations to the rest of the number system 'if I know… I know…' e.g. If I know 1 + 2 = 3 then I know 21 + 2 = 23. If I know 4 + 6 = 10, 24 + 6 = 30. If I know 5 + 5= 10, 5 + 6 = 11 Explore the idea of = as equivalence and balance using empty box partitions, Numicon tiles in balance scales and placing the = symbol in different places in equations. As well as making connections to solve addition problems, children should solve inequality problems, equivalence/ balance problems and empty box problems e.g. 12 = ? + 5 (don't always use number bonds to 10 as they're too familiar with them!), is 4 + 10 > or < than 11 + 4. Create questions like this which draw attention to the underlying structure and place value of the digits. Give children digit cards to place to complete equations and inequalities. They should also be able to order all numbers to 100 and say which are bigger and smaller. Ask questions such as 'how many 1s in 10?' to open up discussion and reasoning.

Year 1 Curriculum Map

Spr 2 **5** **6**	**Measure** ·compare, describe and solve practical problems for: -lengths and heights -mass/weight -capacity and volume ·measure and begin to record -lengths and heights -mass/weight -capacity and volume	The pairs of terms: mass and weight, volume and capacity, are used interchangeably at this stage. Lots of use of apparatus – link with role play areas – shop / cooking. Moving from non standard to standard units of measure. Adults modelling correct vocabulary and language at all times https://www.ncetm.org.uk/resources/42711 ***Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall, short, double, half]*** ***Measure and begin to record the following: lengths and heights*** Autumn review: Compare quantities (i.e. Dots) and numbers using inequality symbols <> and =. These symbols are very important to understand. The = symbol should be read as 'is equivalent to' 'is equal to' 'is the same as' or 'balances with'. Where it is placed in an equation needs to be varied so children get used to this and never think of it as meaning 'the answer is'. Compare lengths and heights using 'longer and shorter' measuring with strips of paper or string etc. or other non-standard units e.g. feet, lolly-sticks or cubes. This is great for estimation and the beginning of unitization. Discuss how it is useful to be more accurate if two people/lengths are almost the same. This is how standard units of measurement arise. The Y1 curriculum does not specify measuring in a particular unit but, depending on your class' security with numbers to 100, you could introduce a metre stick as showing 100 cm. Mark different lengths in cm on the meter stick. How do these compare to your rulers? Tie this in with place value work, placing numbers to 100. Ask children to find half or double a length or height in practical problem solving contexts. Compare weights using 'heavier/lighter ' etc. using balance scales. This is great for estimation and the beginning of unitization i.e. 'how many cubes weigh the same as one egg? Discuss how it is useful to be more about the weight. This is how standard units of measurement arise. The Y1 curriculum does not specify measuring in a particular unit but, depending on your class' security with numbers to 100 and beyond, you could introduce a gram weight and a kilo gram. How many grams do they think weigh the same as 1kg? Investigate. Can they weigh objects using balance scales and grams? Go through the same process comparing capacities. Which glass holds more liquid: the short wide glass or the tall narrow one? Show how it could be the same! Ask children to find half or double a mass or capacity in practical problem solving contexts. *GARDEN*

Year 1 Curriculum Map

Summer Term

Week	**Objective**	
Sum 1 **1** **2**	**Place value and the number system** ·count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ·count, read and write numbers to 100 in numerals ·count in multiples of twos, fives and tens ·given a number, identify one more and one less ·identify and represent numbers using objects and pictorial representations including the number line · use the language of: equal to, more than, less than (fewer), most, least ·read and write numbers from 1 to 20 in numerals and words	https://www.ncetm.org.uk/resources/42455 Review the 'story of' numbers from the Autumn term, particularly teens numbers. Extend this to partition all two digit numbers using Numicon tiles, base ten and place value cards. Place numbers on number lines and discuss their relative value and size. Fill in missing numbers on number lines. Which is the nearest multiple of 10? At EP we call them café numbers. How far to the nearest café? Children should begin to represent two digit numbers (tens and ones) in different ways, using Numicon, straws, ten frames, place value cards etc. They need to understand at this point that if we add tens, the ones digit doesn't change! Explore how a 100 square is just a number track chopped up into 10s. Children can create 100 squares in this way. Do activities where children fill in parts of empty 100 squares and count on or back in 1s or 10s from any number. Represent this with Numicon tiles, base ten or place value counters too to show how the 10s digit is the bit that changes, not the ones digit. At EP we call this spider counting. Begin to forge connections from these foundations to the rest of the number system 'if I know… I know…' e.g. If I know 1 + 2 = 3 then I know 21 + 2 = 23. If I know 4 + 6 = 10, 24 + 6 = 30. If I know 5 + 5= 10, 5 + 6 = 11 Explore the idea of = as equivalence and balance using empty box partitions, Numicon tiles in balance scales and placing the = symbol in different places in equations. As well as making connections to solve addition problems, children should solve inequality problems, equivalence/ balance problems and empty box problems e.g. 12 = ? + 5 (don't always use number bonds to 10 as they're too familiar with them!), is 4 + 10 > or < than 11 + 4. Create questions like this which draw attention to the underlying structure and place value of the digits. Give children digit cards to place to complete equations and inequalities. They should also be able to order all numbers to 100 and say which are bigger and smaller. Ask questions such as 'how many 1s in 10?' to open up discussion and reasoning. Use whichever measure will provide an interesting opportunity to add, subtract and compare amounts.

Year 1 Curriculum Map

Sum 1 **3** **4**	**Calculating + and –** ·read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs ·represent and use number bonds and related subtraction facts within 20 ·add and subtract one-digit and two-digit numbers to 20, including zero ·solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations · solve missing number problems such as 7 = ☐ – 9.	https://www.ncetm.org.uk/resources/42522 Spring review: use the 'story of' numbers to 20, to add and subtract other numbers. For less secure children, stay within 0-20 but give them opportunities to look at related equations (procedural variation). Write addition and subtraction number sentences (equations) e.g. part + part = whole; whole – part = part so 5 + 6 = 11; 6 + 5 = 11; 11 – 6 = 5 and 11 – 5 = 6. Bonds to 10 are crucial, but bonds to other numbers from 2-9 are also really important. Children should continue using bonds to calculate up to 20 and beyond e.g. 11 + 9 = 20 because I know 1 + 9 = 10 , 34 + 6 = 40 because I know 4 + 6 = 10. Do lots of work to make connections from work on place value to the rest of the number system 'if I know… I know…' e.g. If I know 5 + 5= 10, 5 + 6 = 11; If I know 4 + 6 = 10, 4 + 7 must = 11. There are other links to be made using procedural variation: 4 + 6 = 10, 14 + 6 = 20, 24 + 6 = 30. Model whole-part relationships using Numicon, Ten Frames, Cuisenaire rods (where white = 1) and you might introduce base ten. Draw as bar models. *NB. Talk about 'subtract' rather than going for 'take away' or 'find the difference' which are strategies to be explored explicitly.* Strategies to be gradually introduced to get children calculating, not counting: -Quick adds which do not involve bridging 10 e.g. 20 + 7 then 23 + 6 'because I know 3 + 6 = 9' -Quick subtractions e.g. 20 – 7 must be 13 because 10 – 7 = 3. Use concrete manipulatives, the number line image and whole/part models to support this. -Adding strings of numbers by making bonds or finding doubles (law of commutativity explored and flexibility encouraged e.g. we would do 7 + 5 + 3 by adding 7 and 3 to make 10 then 5 more is 15). -Add or subtract 10 to two digit numbers using spider counting (reinforced with Numicon tiles as concrete) and multiples of 10. Can any children add nearly numbers such as 9 by adding 10 and subtracting 1? The 100 square is the key image for this. **Add and subtract numbers which bridge by partitioning the single digit in different ways 10 e.g. 27 + 5 = 27 + 3 + 2; 23 – 7 = 27 – 3 – 4 This strategy needs lots of exploration. A number line might be a useful pictorial representation, or using Numicon tiles. This is the main area that might need further development from the Spring term.** Solve subtraction problems using two strategies: take away and find the difference Pose problems that lend themselves to taking away (calculating using known facts not counting back!) e.g. 65 – 5; 65 – 10; 65 - 11 Pose problems that lend themselves to finding the difference (where numbers are quite close together e.g. 25 – 23 (the difference between 5 and 3 is 2!) A number line or Numicon may be useful for 'finding the difference'. A 100 square is useful for 'taking away'. Check subtractions with the inverse. Write calculations in different ways and explore these using Numicon and balance scales e.g. 13 = ? + 4 ; 3 + 5 = ? – 2; and 2 + 5 > ? - 2

Year 1 Curriculum Map

Sum 1 **5**	**Geometry** ·describe position, direction and movement, including whole, half, quarter and three-quarter turns ·recognise and name common 2-D and 3-D shapes	**1st week of unit in Spring Term – making sure all objectives covered and secure** Pupils use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face. Chn need to use and apply this knowledge – not just count sides / faces etc but use reasoning and sorting activities. Start using visualisation activities. *GARDEN* https://www.ncetm.org.uk/resources/42821 https://www.ncetm.org.uk/resources/42879 Show chn that rectangles, triangles, cuboids and pyramids are not always similar to each other. Questions such as "Why is this NOT a triangle?" when holding up a square to encourage reasoning. Chn need to use and apply this knowledge – not just count sides / faces etc Start using visualisation activities. Look at, sort and notice the properties of 2-D shapes at different orientations and of different sizes. Children must get the hang not just of the names but of the properties starting in Y1 with sides and corners (vertices!). What are the sides like? Curved or straight? How many sides are there? Examine how 3D shapes have faces, edges and corners (vertices). Count these properties. Use nets to explore which 2D shapes define their faces. Can you spot 3D shapes in every-day life?

Year 1 Curriculum Map

HALF TERM		
Sum 2 **1** **2**	**Calculating x and /** ·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. **Count in multiples of 2, 5 and 10** Spot patterns in the multiples. Make a fuss when you say a multiple of 10 when counting in 2s! Solve number sequence problems.	Through grouping and sharing small quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities They make connections between arrays, number patterns, and counting in twos, fives and tens. Link multiplication and division from outset – knowledge of inverse should be implicit – e.g. there are 3 boxes with 2 cakes in each box there are 6 cakes – if I split 6 cakes into 3 boxes evenly there are 2 in each box. Use Numicon to support understanding – match activities in Numicon guides to objectives Use of concrete apparatus / real life contexts initially. Allow chn to represent in their own way initially, for example pictorially and to experiment with how they record / use recordings to help them calculate. https://www.ncetm.org.uk/resources/42572 ***There is no emphasis in the Y1 or Y2 Curriculum on doubling but time should be spent on doubling numbers to 10, or 12, and then to the inverse: halving.*** ***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.*** Present children with some division problems which require 'fair sharing' e.g. 'one for you, one for you, one for you…' Children usually have a firm grasp of 'what's fair' but may not be totally secure with this from Reception. Children may see division as 'sharing' so halving needs explicit teaching as viewing the number or amount 'in two groups'. It is linked to fractions work in the next unit. Look at doubling as 'two groups of' which is based on the idea of 'unitisation' where you count in 'groups of' a number. Numicon tiles are very useful for this and you can also use balance scales to show that 4 + 4 = 2 X 4 = 8. Spend time exploring what the X symbol represents. It is not explicit in the Y1 curriculum that they must understand this symbol but they should understand this as 'four add four is equivalent to two groups of 4'. ***Count in multiples of twos, fives and tens:*** Make links with counting in these numbers and 'unitising' e.g. '0, 2, 4, 6, 8… we have counted four groups of 2 and it equalled 8! We can write this as 2 + 2 + 2 + 2 or 4 X 2. Encourage children to spot patterns in the multiples as they count in twos, fives and tens. ***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:*** Present children with some division problems which suit 'grouping' as a strategy. Use concrete manipulatives… can you put these counters into groups of 5? Use Cuisenaire rods to show step counting 'how many 2s make 12'. Represent this pictorially with a bar model showing whole-equal parts. Show counting in groups of 2, 5 and 10 on a number line. Create arrays to solve multiplication or division word problems. NB If we are dividing by 5 then we should draw our array in 5s until we reach our total, rather than drawing 15 dots then making rings round them in 5s! Solve problems by creating arrays, using Cuisenaire rods to show 'how many 2s make 12', counting on a number line (repeated addition) or using known and related facts. Represent this with a bar model showing whole-equal parts. Children should always be encouraged to use facts they know to link to solutions.

Year 1 Curriculum Map

Sum 2 **3**	**Fractions** ·recognise, find and name a half as one of two equal parts of an object, shape or quantity ·recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	Recap week: Pupils are taught half and quarter as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. For example, they could recognise and find half a length, quantity, set of objects or shape. Pupils connect halves and quarters to the equal sharing and grouping of sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole. Lots of different concepts of half to be dealt with: Half of an object or shape Half of an amount – links with sharing between 2 Halving as an operation https://www.ncetm.org.uk/resources/42627 *NB. Although this document shows fractions like this ½ or ¾ it is MUCH better for you to write your fractions by hand or on a smart board so that the denominator is below not beside the numerator.* ***Recognise, find and name a half as one of two equal parts of an object, shape or quantity (fractions of shapes)*** Explore equal and unequal pieces of shapes, referring to the previous unit of work on geometry. Really emphasise that pieces must be equal and they are equal parts of a whole. Discuss what our 'whole' is. Tell them a shape is 1/2 and then get them to draw the rest. Focus on the denominator as representing the parts the whole is divided into. Keep the numerators as one at the beginning (unit fractions). Show 1/2 represented in different ways. You might even explore its equivalence with 2/4 of a shape. Ensure the shapes are different! Show them objects cut into 2 but ones which are not halves because not equal. Can the children find different ways of colouring exactly half of square? Can you find half of my cubes? Half of my water? Try paper folding and building a fraction wall for the half and quarter family. If when we have 2 equal parts we call one of them 1/2 , how might we write our fraction if we have one of 4 equal parts? We call this a quarter! Label shapes that have ¼ shaded. Use fraction cards to support the very beginnings of equivalence between ½ and 2/4 . https://www.ncetm.org.uk/resources/43609 ***Recognise, find and name half as one of two equal parts*** Count in fraction steps of halves on your counting stick, showing pictorial representations to support understanding. At first you might count in physical objects e.g. 'half an apple, one whole apple, one and a half apples, two apples…. Etc.' Discuss how we can write the fraction half as ½. The numerator shows us how many equal parts we have… 1/2 2/2 ('One whole!') 1 ½, 2 wholes, 2 1/2 , 3 wholes etc. Discuss how we can write the fraction quarter as 1/4. The numerator shows us how many equal parts we have. Give them opportunities to label fractional steps on a number line, modelled by your counting stick. Spend time exploring the meaning of 2/4 and perhaps its equivalence to ½. Spend even longer exploring ¾ and what the 3 signifies.

Year 1 Curriculum Map

Sum 2 **4**	**Measure** ·compare, describe and solve practical problems for: -lengths and heights -mass/weight -capacity and volume ·measure and begin to record -lengths and heights -mass/weight -capacity and volume	Revision of Spring unit – going over any concepts struggled with in Spring Term. The pairs of terms: mass and weight, volume and capacity, are used interchangeably at this stage. Lots of use of apparatus – link with role play areas – shop / cooking. Moving from non standard to standard units of measure. Adults modelling correct vocabulary and language at all times https://www.ncetm.org.uk/resources/42711 ***Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall, short, double, half]*** ***Measure and begin to record the following: lengths and heights*** Autumn review: Compare quantities (i.e. Dots) and numbers using inequality symbols <> and =. These symbols are very important to understand. The = symbol should be read as 'is equivalent to' 'is equal to' 'is the same as' or 'balances with'. Where it is placed in an equation needs to be varied so children get used to this and never think of it as meaning 'the answer is'. Compare lengths and heights using 'longer and shorter' measuring with strips of paper or string etc. or other non-standard units e.g. feet, lolly-sticks or cubes. This is great for estimation and the beginning of unitization. Discuss how it is useful to be more accurate if two people/lengths are almost the same. This is how standard units of measurement arise. The Y1 curriculum does not specify measuring in a particular unit but, depending on your class' security with numbers to 100, you could introduce a metre stick as showing 100 cm. Mark different lengths in cm on the meter stick. How do these compare to your rulers? Tie this in with place value work, placing numbers to 100. Ask children to find half or double a length or height in practical problem solving contexts. Compare weights using 'heavier/lighter ' etc. using balance scales. This is great for estimation and the beginning of unitization i.e. 'how many cubes weigh the same as one egg? Discuss how it is useful to be more about the weight. This is how standard units of measurement arise. The Y1 curriculum does not specify measuring in a particular unit but, depending on your class' security with numbers to 100 and beyond, you could introduce a gram weight and a kilo gram. How many grams do they think weigh the same as 1kg? Investigate. Can they weigh objects using balance scales and grams? Go through the same process comparing capacities. Which glass holds more liquid: the short wide glass or the tall narrow one? Show how it could be the same! Ask children to find half or double a mass or capacity in practical problem solving contexts. *GARDEN*

Year 1 Curriculum Map

Sum 2 **5** **6**	**Place value and the number system** ·count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ·count, read and write numbers to 100 in numerals ·count in multiples of twos, fives and tens ·given a number, identify one more and one less ·identify and represent numbers using objects and pictorial representations including the number line · use the language of: equal to, more than, less than (fewer), most, least ·read and write numbers from 1 to 20 in numerals and words	https://www.ncetm.org.uk/resources/42455 Review the 'story of' numbers from the Autumn term, particularly teens numbers. Extend this to partition all two digit numbers using Numicon tiles, base ten and place value cards. Place numbers on number lines and discuss their relative value and size. Fill in missing numbers on number lines. Which is the nearest multiple of 10? At EP we call them café numbers. How far to the nearest café? Children should begin to represent two digit numbers (tens and ones) in different ways, using Numicon, straws, ten frames, place value cards etc. They need to understand at this point that if we add tens, the ones digit doesn't change! Explore how a 100 square is just a number track chopped up into 10s. Children can create 100 squares in this way. Do activities where children fill in parts of empty 100 squares and count on or back in 1s or 10s from any number. Represent this with Numicon tiles, base ten or place value counters too to show how the 10s digit is the bit that changes, not the ones digit. At EP we call this spider counting. Begin to forge connections from these foundations to the rest of the number system 'if I know… I know…' e.g. If I know 1 + 2 = 3 then I know 21 + 2 = 23. If I know 4 + 6 = 10, 24 + 6 = 30. If I know 5 + 5= 10, 5 + 6 = 11 Explore the idea of = as equivalence and balance using empty box partitions, Numicon tiles in balance scales and placing the = symbol in different places in equations. As well as making connections to solve addition problems, children should solve inequality problems, equivalence/ balance problems and empty box problems e.g. 12 = ? + 5 (don't always use number bonds to 10 as they're too familiar with them!), is 4 + 10 > or < than 11 + 4. Create questions like this which draw attention to the underlying structure and place value of the digits. Give children digit cards to place to complete equations and inequalities. They should also be able to order all numbers to 100 and say which are bigger and smaller. Ask questions such as 'how many 1s in 10?' to open up discussion and reasoning. Use whichever measure will provide an interesting opportunity to add, subtract and compare amounts.
Sum 2 **7**	**Calculating + and –** ·read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs ·represent and use number bonds and related subtraction facts within 20 ·add and subtract one-digit and two-digit numbers to 20, including zero ·solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations · solve missing number problems such as 7 = ☐ – 9.	***Look back over all number system and calculating units of work, objectives and 'destinations'. Consider which need more work. It may be that practice and repetition of bonds and 'the story of' needs to be embedded before the long holiday and transition to Y2. Alternatively, if these bonds are secure, it might be that calculation strategies for subtraction, for example, are needed. Can children answer questions on all four operations (but particularly addition and subtraction) which are posed in different ways e.g.*** - **Word problems** - **Number sequences** - **Missing number equations with empty circles instead of boxes (things like this can throw them!)** **Equations with the = symbol or an expression on either side of the = e.g. 4 + 1 = ? + 3**