Mathematics – Specific Area

<u>Number</u>

<u>Prior Knowledge – Development Matters – 3 – 4 Year Olds</u>
- Recite numbers past 5
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle)

Baseline (Sept)	Autumn (Dec)	Spring (April)	Summer (June)	By the end of Reception:	ELG's	Links to National Curriculum Key Stage 1	By the end of Year One:
Say one number for each item in order for a small amount (adult may assist in touch counting the objects to aid verbal counting). Show 'finger numbers' up to 5. Recognise objects as individual quantities. Verbally adds items by continuing to count when the object/group changes e.g. counting children's shoes	Touch objects individually to count to 5 Count out an amount of a given number to 5. Mark make for a given number to 5. Find one more or less than a given number to 10. Recognise quantities to 2 without counting in variety of contexts. Recognise how to work out some addition number bonds for numbers 1-3. Recognise how to work out some subtraction number bonds for numbers 1-3.	Touch count objects individually to 10. Count out an amount of a given number up to 10. Represent numbers in a variety of ways e.g. numerical digits, lines, pictures ect Find one more or less than a given number to 10. Recognise quantities to 4 without counting in variety of contexts. Recognise how to work out some addition number bonds for numbers 1-5. Recognise how to work out some subtraction number bonds for numbers 1-3. Explain what a double is.	Count mixed objects in a group (visually/verbally). Recognise some number combinations that make up a number to 10. Recognise some representations of numbers to 10 without counting. Recognise quantities to 5 without counting in variety of contexts. Subitise amounts in a mixed display e.g. groups in the same picture. Recall addition number bonds 1-5 Recognise how to work out some subtraction number bonds for numbers 1-3. Recall some doubles facts to 10. Recall some addition number bonds to 10.	Count objects, actions and sounds. Understand the 'one more than/one less than' relationship between consecutive numbers. Link the number symbol (numeral) with its cardinal number value. Solve real world mathematical problems with numbers up to 5. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. Split objects into equal and unequal groups.	Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting up to 5). Automatically recall number bonds up to 5, including subtraction facts and some number bonds to 10 including doubles facts.	Count objects to 10. Count to and across, forwards and backwards, beginning with 0 or 1, or any given number. Count one more for numbers within 20. Count one less for numbers within 20. Add and subtract one-digit and two-digit numbers to 20, including zero. Identify and represent numbers using objects and pictorial representations. Fact families – addition facts. Find number bonds for numbers within 10. Know systematic methods for number bonds within 10. Compare number bonds. Solve one step problems that involve addition and subtraction, using concrete or pictorial representations, and missing number problems. Represent and use number bonds and related subtraction facts within 20.	Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number Count in multiples of twos, fives and tens Count, read and write numbers to 100 in numerals Given a number, identify one more and one less Read and write numbers from 1 to 20 in numerals and words 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. Represent and use number bonds and related subtraction facts within 20 Add and subtract one-digit and two-digit numbers to 20, including zero ones Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 10 + 7 = - 9 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.

<u>Numerical Patterns</u>
<u>Prior Knowledge – Development Matters – 3 – 4 Year Olds</u>
- Compare small quantities using relevant mathematical vocabulary
- Talk about and recognise patterns around them
- Recite numbers to 5

Baseline (Sept)	Autumn (Dec)	Spring (April)	Summer (June)	By the end of Reception:	ELG's	Links to National Curriculum Key Stage 1	By the end of Year One:
Recite numbers to 5 Compare quantities using mathematical language e.g. more, less. Solve real world mathematical problems with numbers up to 5.	Verbally count accurately to 10. Understand the language of one more and one less then. Recognise that there are symbols one more and one less then and equals. Share objects into groups of two equally. Explore verbally counting in ones up to 10.	Verbally count accurately to 15 Beginning to recognise the number patterns between 1-15 Beginning to be able to verbally count in 2's to 10 Find one more and one less than to 5. Recognise the symbol for equals. Share objects into groups of three equally. Explore verbally counting patterns in ones and twos up to 10. Explore double facts to 10.	Verbally count accurately beyond 20 Recognise the number patterns between 1-20 Able to verbally count in 2's and 5's to 10. Beginning to be able to use my pattern counting system to count to 20 and beyond in 2's and 5's Recognise the symbol for less than. Find one more and one less than to 10 using different quantities. Share objects into groups of up to 10. Explore and recognise verbal counting patterns in ones, twos, fives and tens. Recognise odd numbers to 10. Recall double facts up to 10.	Count objects, actions and sounds. Understand the 'one more than/one less than' relationship between consecutive numbers. Link the number symbol (numeral) with its cardinal number value. Solve real world mathematical problems with numbers up to 5. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. Split objects into equal and unequal groups.	Verbally count beyond 20, recognising the pattern of the counting system. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and represent patterns with numbers up to 10, including evens and odds, double facts and quantities can be distributed equally.	Count forwards and backwards within 100, starting with any number. Count one more for numbers within 20. Count one less for numbers within 20. Compare numbers within 10. Order numbers up to 10. Count in 2's within 50. Count in 5's within 50. Count in 10s. Compare up to 10 objects. Introduce more than, less than and equals to symbols for numbers within 10. Compare groups of objects within 20. Order groups of objects. Count numbers to 100 in numerals, count in multiples of 2's, 5's and 10's. Compare groups of objects within 20. Solve one step problems that involve addition and subtraction, using concrete or pictorial representations, and missing number problems.	Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number Count in multiples of twos, fives and tens Count, read and write numbers to 100 in numerals Given a number, identify one more and one less Read and write numbers from 1 to 20 in numerals and words 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. Represent and use number bonds and related subtraction facts within 20 Add and subtract one-digit and two-digit numbers to 20, including zero ones Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 10 + 7 = - 9 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.