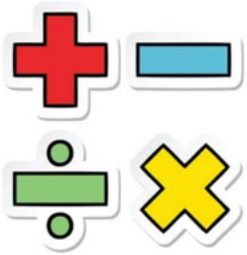
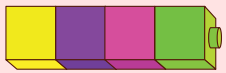
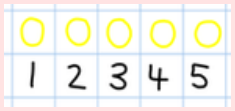
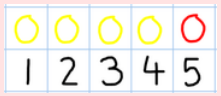
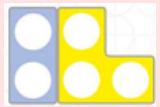
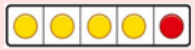
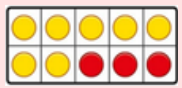
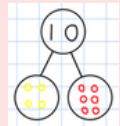
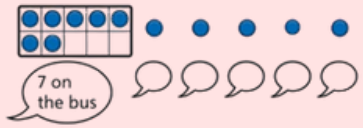
Sawtry Infant School

Calculation Policy

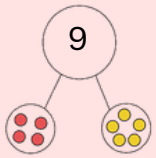
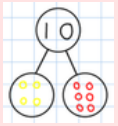
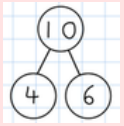
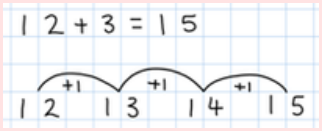
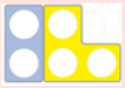
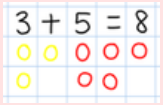
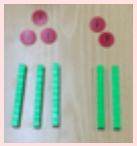
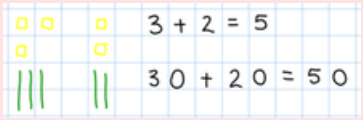


Author	Georgia Pennell (KS1 Lead and Maths Lead)
Created	September 2026
Review date	September 2029

EYFS Addition

	Concrete	Pictorial	Abstract
Counting	Count concrete objects to understand the number system.  	Draw pictures to count. 	Use a number line to count up and count on. 
Adding one more	Add one more concrete object to a group. 	Draw one more picture to add one more to the group. 	Use a number line to recognise one more.  "One more than 5 is 6."
Finding number bonds within 10	Combine objects, such as Numicon, and count them all. 	Use five and ten frames to represent number bonds within 10.  	Use representations, such as part whole models and ten frames, to show number bonds within 10. 
Adding by counting on	Use concrete objects to count on and understand that this is addition. 	Use counters to represent their counting strategy. 	Count on using number lines. 

Year 1 Addition

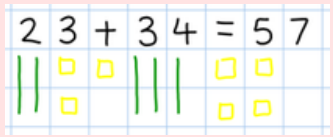
	Concrete	Pictorial	Abstract
Part, whole models.	Use counting resources to add two numbers together. 	Draw counters to add two numbers together.  4 + 6 = 10	Use part, whole models with written numbers.  4 + 6 = 10
Counting on.	Use completed number lines to count on in ones.  3 + 4 = 7	Draw number lines to count on in ones. 	Count on, out loud, to find the total. 4 + 5 = "I start on 4 and count on 5. 5, 6, 7, 8, 9. 4 + 5 = 9."
Adding two, one digit numbers.	Use concrete resources, such as Numicon and counters, to represent the numbers they are adding together. 	Draw counters to add the numbers together. 	Use addition and subtraction fact families. 3 + 5 = 8 8 - 3 = 5
Using fact families.	Use manipulatives, such as place value counters and dienes, to model fact families.  3 + 2 = 5 so... 30 + 20 = 50	Draw representations of dienes to model fact families. 	Use knowledge of fact families to solve addition problems. 3 + _ = 5 _ + 20 = 50 300 + _ = 500

Adding two digit numbers.

Use manipulatives, such as dienes and place value counters, to add numbers.



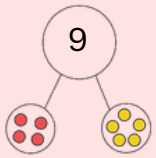
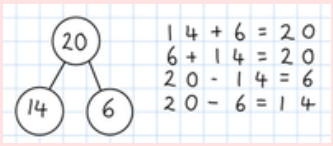
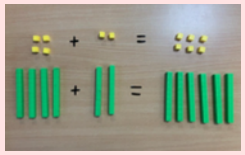
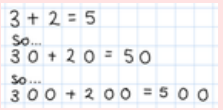
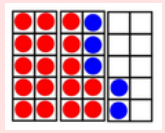
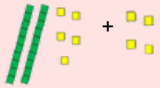
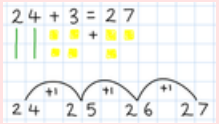
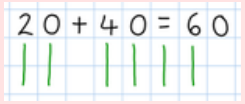
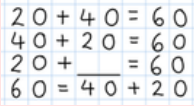
Draw representations of the numbers to add together.

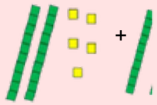
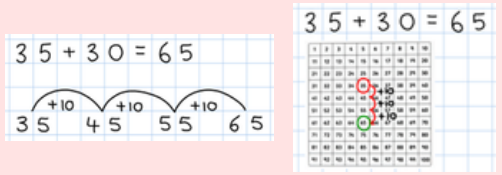
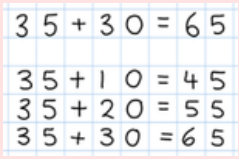
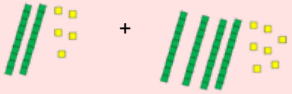
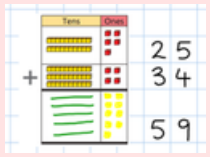
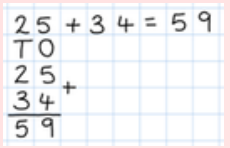
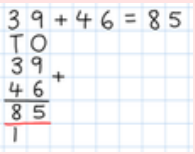


Use addition facts to add together numbers mentally.

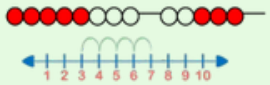
24 + 13 = 37

Year 2 Addition

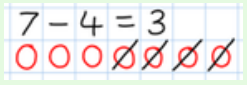
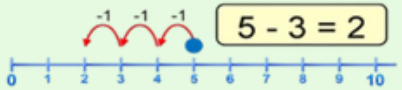
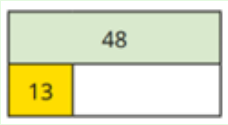
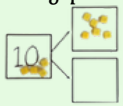
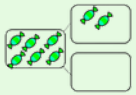
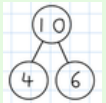
	Concrete	Pictorial	Abstract
Part, whole models.	Use part, whole models and counters to partition numbers in different ways. 	Use part, whole models with written numbers. 	Explore addition fact families, using knowledge of the inverse relationship of addition and subtraction to check calculations.
Using known facts.	Use dienes to explore known facts. 	Draw dienes to explore known facts. 	Use written methods to explore known facts. 
Adding a two digit number and ones.	Use concrete resources, such as ten frames and counters, dienes and place value counters, to add two numbers together. 	Draw representations of numbers, such as number lines and dienes, to add them together. 	Use mental methods to add two numbers together. 24 + 3 = “Start on 24 and count on 3. Lock 24 in … 25, 26, 27. 24 + 3 = 27.”
Adding multiples of ten.	Use dienes to count on in 10s. 	Draw representations of dienes to add multiples of 10 together. 	Use known facts to add multiples of 10. 

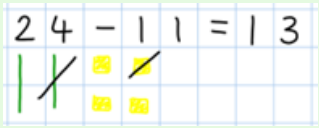
Adding a two digit number and tens.	Use dienes or place value counters to explore how the ones digit does not change. 	Draw number lines or use a 100 square to add on multiples of ten. 	Use known facts to add a two digit number and tens. 
Adding two, two digit numbers.	Use dienes to add two, two digit numbers, counting the tens and ones. 	Draw dienes in a column style method to add together the tens and ones. 	Use column method to reinforce place value. without exchange  with exchange 

EYFS Subtraction

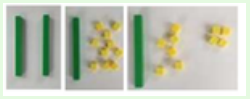
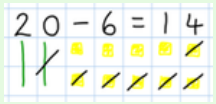
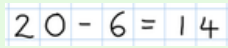
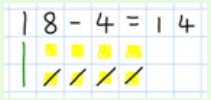
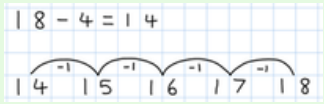
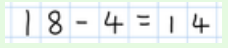
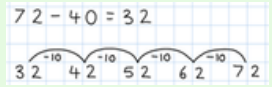
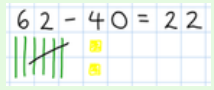
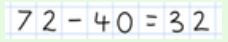
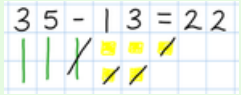
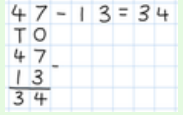
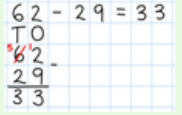
	Concrete	Pictorial	Abstract
Counting back.	Use counting resources to count back and understand the number system.	Use pictorial representations, such as bead strings, number lines and cubes to count back. 	Sing Countdown Rhymes with the use of props.
Taking away.	Remove counting resources to find how many are left.  6 - 3 = 3	Draw objects and cross some out to find how many are left. 	Use a number line to jump backwards and find how many are left. 
Subtracting within ten.	Use counting resources to understand how to subtract ones.  6 - 1 = 5	Draw representations of numbers, cross them out and work out how many are left.  5 – 3 = 2	Use understanding of number bonds to subtract.

Year 1 Subtraction

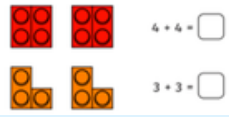
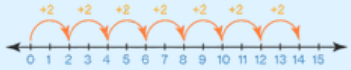
	Concrete	Pictorial	Abstract
Taking away ones.	Use counting resources to physically take away.  6 - 3 = 3	Cross out drawn objects to show how many are remaining. 	Use mental methods to count backwards to find how many are left. "4 - 3 = 1 3, 2, 1."
Counting back.	Use counting resources to move them away from the group and count backwards. 	Using pictorial representations, such as number lines and 100 squares, to count backwards. 	Use mental methods and count backwards to find how many are left. "5 - 3 = 2 4, 3, 2."
Finding the difference.	Use counters or cubes to represent the numbers being compared, draw a bar model around them and find the difference.   "10 is 5 more than 5."	Draw bar models, with numerals, to find the difference.  "The difference between 48 and 13 is 35."	Use mental methods and known number facts to find the difference between two numbers.
Fact families.	Use part, whole models and counters to find the missing part and solve the fact family. 	Use part, whole models and pictorial representations to find the missing part and solve the fact family. 	Use part, whole models with numerals to solve the missing part. 

Subtracting 2 digit numbers	Use dienes or place value counters to physically subtract a number and find how many are left.	Draw pictorial representations and cross out the objects to find out how many are left.  	Use mental methods to count back to find how many there are left. 24 – 7 = “Lock 24 in … 23, 22, 21, 20, 19, 18, 17. 24 – 7 = 17.”

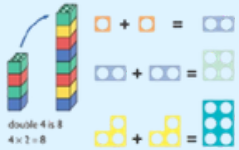
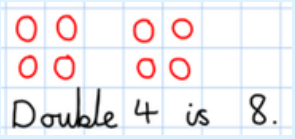
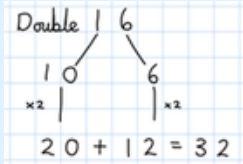
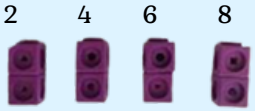
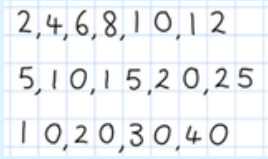
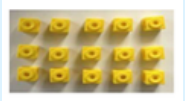
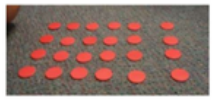
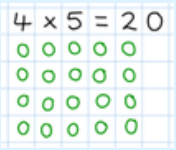
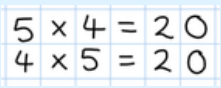
Year 2 Subtraction

	Concrete	Pictorial	Abstract
Regrouping a ten into ten ones	Using dienes, exchange one 10 for 10 ones, then take away the ones. 	Using pictorial representations of dienes, exchange 1 10 for 10 ones, then cross out the amount. 	Use mental methods to subtract across tens. 
Subtracting a 2 digit number and ones	Use dienes or place value counters to take away the ones. 37 - 3 = 34 	Use pictorial representations or draw a number line to cross out or count backwards.  	Use mental methods and count backwards to find how many are left. 
Subtracting a 2 digit number and tens.	Use dienes to take away the tens, and explore that the one digit does not change. 53 - 20 = 33 	Use dienes, a number line or a 100 square to count back in tens.   	Use mental methods to subtract tens from a 2 digit number. 
Subtracting 2, 2 digit numbers.	Use dienes to count the remaining tens and ones. 46 - 12 = 34 	Draw pictorial representations of dienes and cross out the tens and the ones. 	Use column method to subtract the ones, then the tens. Without exchange  With exchange 

EYFS Multiplication

	Concrete	Pictorial	Abstract
Doubling	Use concrete objects to understand doubling is adding the same amount twice.  	Use pictorial representations to understand doubling is adding the same amount twice.  	Understand doubling as repeated addition and use resources to support them. 
Counting in twos	Count up in 2s using concrete objects and resources. 	Count up in 2s using bead strings and number lines. 	

Year 1 Multiplication

	Concrete	Pictorial	Abstract
Doubling	Use concrete objects to create an amount twice to demonstrate doubling. 	Draw representations to show how to double amounts. 	Partition a number into tens and ones, double each part, then combine the numbers to find double. 
Count in multiples (2, 5 and 10)	Use counting resources and Numicon to show groups and count up in the multiples. 	Draw arrays to count up in multiples. 	Write sequences with multiples. 
Counting in multiples of 2, 5 and 10 using arrays.	Use counting resources or pegs and peg boards to build arrays and understand that multiplication is commutative, and the order of the multiplication does not affect the answer.  	Draw arrays to represent different multiplications. 	Use mental methods to solve multiplication questions. 

Counting in multiples of 2, 5 and 10 using repeated addition.

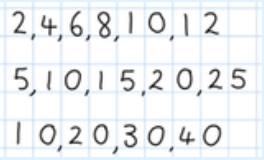
Use Numicon to count up in the times table.



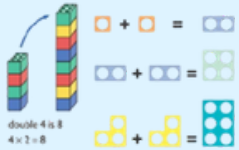
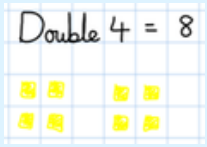
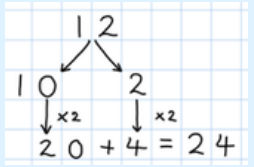
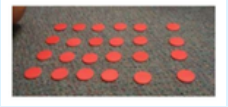
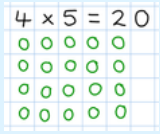
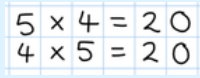
Use pictorial representations to show counting in multiples.



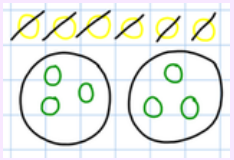
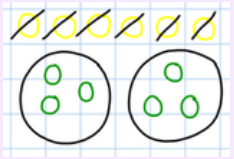
Write sequences with multiples.



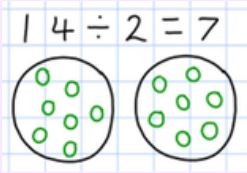
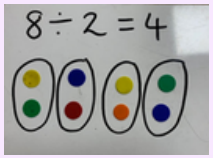
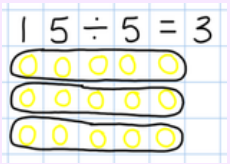
Year 2 Multiplication

	Concrete	Pictorial	Abstract
Doubling	Use concrete objects to create an amount twice to demonstrate doubling. 	Draw representations to show how to double amounts. 	Partition a number into tens and ones, double each part then combine the numbers to find double. 
Counting in multiples of 2, 5 and 10 using arrays.	Use counting resources or pegs and peg boards to build arrays and understand multiplication is commutative and the order of the multiplication does not affect the answer.  	Draw arrays to represent different multiplications. 	Use mental methods to solve multiplication questions. 
Counting in multiples of 2, 5 and 10 using repeated addition.	Use concrete resources, such as counters, Numicon or dienes to count up in the times table. 	Use pictorial representations to show counting in multiples. 	Write out repeated addition sequences. 5 x 8 = 40 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 40

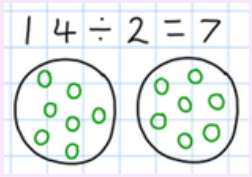
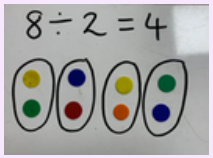
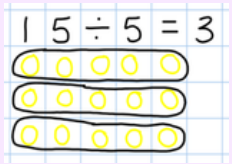
EYFS Division

	Concrete	Pictorial	Abstract
Sharing	Use concrete objects to count and share objects equally.  	Draw pictorial representations to share objects equally. 	
Grouping	Count concrete objects and make equal groups. 	Draw pictorial representations to group them equally. 	Use mental methods to solve multiplication questions.

Year 1 Division

	Concrete	Pictorial	Abstract
Sharing	Use concrete objects to share out equally. 	Draw pictorial representations to share objects equally. 	Use mental methods to share amounts equally. 12 shared between 3 is 4.
Grouping	Use counting objects to create equal groups. 	Draw pictorial representations to group them equally. 	Use mental methods to group amounts equally. How many groups of 6 are in 24?

Year 2 Division

	Concrete	Pictorial	Abstract
Sharing	Use counting objects to share out equally. 6 ÷ 3 = 2 	Draw pictorial representations to share objects equally. 	Use mental methods to solve division word problems and share amounts equally. Bob has 10 bananas; he shares them with his friend. How many bananas will they have each?
Grouping	Use counting objects to create equal groups. 	Draw pictorial representations to group them equally. 	Use mental methods to solve division word problems and group amounts equally. How many groups of 6 are in 24?