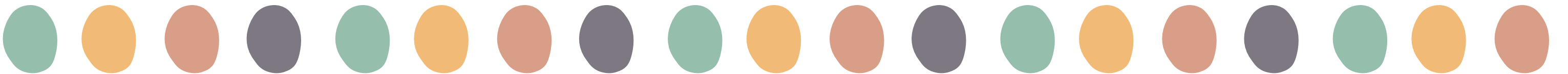


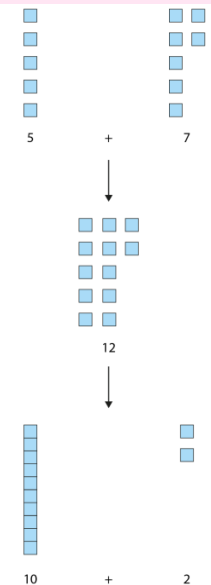
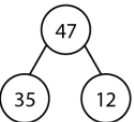
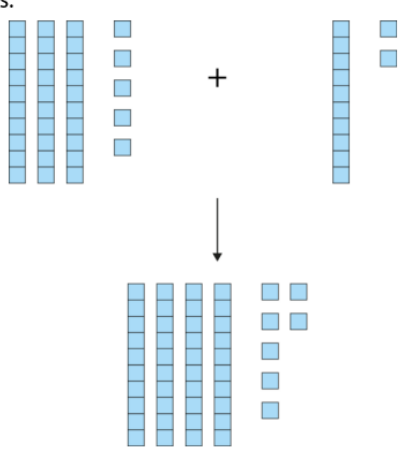
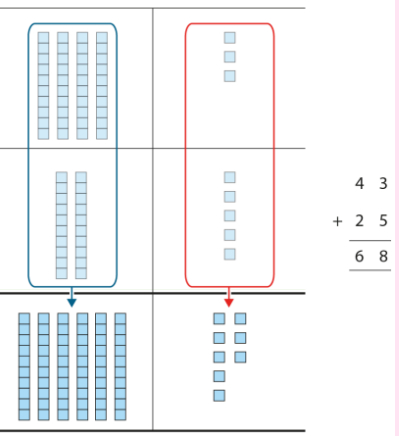
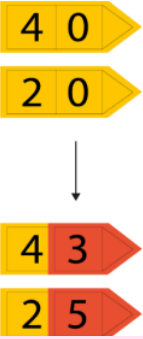
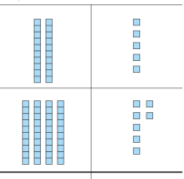
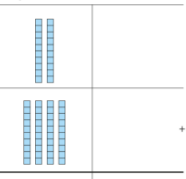
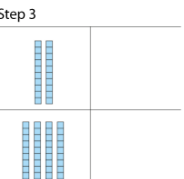
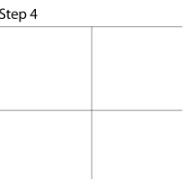
Y3- Overview

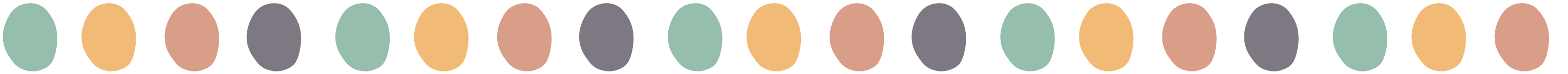
	Autumn 1			Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2			
Unit	1	2				3	4	5	6	7	8		9	10	11

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Spring 1	Column Addition (2 weeks)
Ready to progress	3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction
NCETM documents	https://www.ncetm.org.uk/media/a0ohgpk/ncetm_mm_spl_y3_se20_teach.pdf#page=4
Small steps	To identify the addends and the sum in column addition. To use place value to correctly lay out column addition. To add 2-digit numbers using column addition. To add 3-digit numbers using column addition. To use column addition to solve problems. To use column addition to add numbers by regrouping ones. To use column addition to add numbers by regrouping tens. To use column addition with regrouping in the ones and tens. To use known facts and strategies to accurately and efficiently calculate and check column addition. To use column addition with regrouping to solve problems.
Links	NCETM- https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ncetm.org.uk%2Fmedia%2Frbjjo5b%2Fcp-year-3-unit-5-column-addition.pptx&wdOrigin=BROWSELINK OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks2/units/column-addition/lessons?sid-j69028-H6dAScBzEe&sm=0&src=3 WHITE ROSE https://assets.whiteroseeducation.com/new-schemes/Y3%20Autumn%20Block%202%20SOL%20Addition%20and%20subtraction.pdf Mastery with greater depth https://www.ncetm.org.uk/media/oaqfcvjq/mastery_assessment_y3.pdf
Reasoning	True or False? Are these number sentences true or false? Reasoning required: 1.597 + 7 = 614 2.804 - 70 = 744 3.768 + 140 = 908 Hard or Easy Questions Which of these are easy or hard? Explain your reasoning: 1.323 + 10 = 2.393 + 10 = 3.454 - 100 = 4.954 - 120 = Explain why the hard questions are hard. Convince Me Fill in the missing digits. The total is 201. Each missing digit is either a 9 or a 1. Write in the missing digits. Is there only one way of doing this or lots of ways? Convince me. Making an Estimate Which of these number sentences have an answer between 50 and 60? 1.174 - 119 2.333 - 276 3.932 - 871 Always, Sometimes, or Never? Answer with Always, Sometimes, or Never and explain why: 1.Is it always, sometimes, or never true that when you subtract a multiple of 10 from any number, the units digit of that number stays the same? 2.<u>Is it always, sometimes, or never true that when you add two numbers together, you will get an even number?</u>



	Column Addition (2 weeks)				
Problem solving	Click on me				
Glossary	• Addend - An addend is a number added to another. • Sum - The sum is the total when numbers are added together. • Equation - An equation shows that one number or calculation is equal to another. • Column addition - Column addition is a way of adding numbers by writing a number below another. • Regroup - Regroup means moving an amount to make a calculation easier. • Efficient - Being efficient means finding a way to solve a problem quickly whilst also maintaining accuracy. • Estimate - Estimation means to find a value that is close enough to the right answer, usually with some thought or calculation involved.				
Stem sentences	Addend plus addend is equal to the sum Addend plus addend addend is equal to the sum (and so on.) Dienes- We live up the ones; ____ one(s) plus ____ one(s). We live up the tens; ____ ten(s) plus ____ ten(s) Column addition- The ____ is in the ones column- it represents ____ one(s); the ____ is in the ones column- it represents ____ one(s). The ____ is in the tens column- it represents ____ ten(s); the ____ is in the tens column- it represents ____ ten(s). In column addition, we start at the right-hand side. Dienes ____ one(s) plus one(s) is equal to ____ ones. ____ tens(s) plus ten(s) to equal to ____ tens. Column addition- The ones column represents ____ one(s) plus ____ one(s) is equal to ____ ones. The tens column represents ____ ten(s) plus ____ ten(s) is equal to ____ tens If the column sum is equal to ten or more, we must regroup				
Representations	$35 + 12 = 35 + 10 + 2$ $= 45 + 2$ $= 47$ $35 + 12 = 47$  Part-part-wholes: <table border="1" data-bbox="674 1623 978 1691"><tr><td colspan="2">47</td></tr><tr><td>35</td><td>12</td></tr></table> Dienes:  Column addition: $\begin{array}{r} 35 \\ + 12 \\ \hline 47 \end{array}$ Arrow cards:  Step 1 $\begin{array}{r} 35 \\ + 12 \\ \hline \end{array}$ Step 2 $\begin{array}{r} 35 \\ + 12 \\ \hline 47 \end{array}$ Step 3 $\begin{array}{r} 35 \\ + 12 \\ \hline 47 \end{array}$ Step 4 $\begin{array}{r} 35 \\ + 12 \\ \hline 47 \end{array}$	47		35	12
47					
35	12				

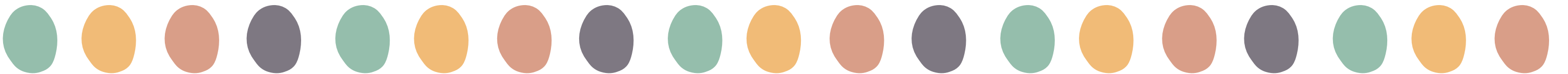


Y3- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2			
Unit	1	2			3	4	5	6	7	8		9	10	11

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Spring 2	Understand additive relationships and apply them to rearrange equations (2 weeks)
Ready to progress	3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction
NCETM documents	FROM TEACHING POINT 4 1.19 Securing mental strategies: calculation up to 999 https://www.ncetm.org.uk/classroom-resources/primm-119-securing-mental-strategies-calculation-up-to-999/
Small steps	To rearrange addition equations. To rearrange subtraction equations. To understand the relationship between addition and subtraction. To identify knows and unknowns in addition equations. To identify knows and unknowns in subtraction equations. To use the additive relationship to rearrange and solve equations. To solve problems using scaled bar chats, pictograms and tables. To understand why the order of addition and subtraction is chosen. To solve multi- step addition and subtraction problems.
Links	NCETM- https://www.ncetm.org.uk/classroom-resources/primm-119-securing-mental-strategies-calculation-up-to-999/ OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks2/units/understand-additive-relationships-and-apply-them-to-rearrange-equations/lessons?sid-5844d8=MDxgRIzYrQ&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/resources?year=year-3-new&subject=maths Mastery with greater depth https://www.ncetm.org.uk/media/oaqfcvjg/mastery_assessment_y3.pdf
Reasoning	True or false? Are these number sentences true or false? 597 + 7 = 614 804 - 70 = 744 768 + 140 = 908 Give your reasons. Hard and easy questions Which questions are easy / hard? 323 + 10 = 393 + 10 = 454 - 100 = 954 - 120 = Explain why you think the hard questions are hard? Convince me + + The total is 201 Each missing digit is either a 9 or a 1. Write in the missing digits. Is there only one way of doing this or lots of ways? Convince me Making an estimate Which of these number sentences have the answer that is between 50 and 60 174 - 119 333 - 276 932 - 871 Always, sometimes, never Is it always, sometimes or never true that if you subtract a multiple of 10 from any number the units digit of that number stays the same. Is it always, sometimes or never true that when you add two numbers together you will get an even number



	Understand additive relationships and apply them to rearrange equations (2 weeks)
Problem solving	Click on me
Glossary	• Addend - An addend is a number added to another. • Sum - The the total when numbers are added together. • Equation - An equation shows that one number or calculation is equal to another. • Minuend - The minuend is the number being subtracted from. • Subtrahend - A subtrahend is a number subtracted from another. • Difference - The difference is the result after subtracting one number from another. • Rearrange - Rearrange means to change an equation. It could mean moving the parts or the whole or changing it from an addition into a subtraction equation. • Reorder - Reorder means arrange something in a different way. • Bar chart - A bar chart uses rectangular bars to show different values. • Pictogram - A pictogram uses pictures to show information. • Table - A table has information arranged in rows and columns. • Efficient - Working efficiently means finding a way to solve a problem quickly whilst also maintaining accuracy.
Stem sentences	For calculations that involve both addition and subtraction steps, we can add then subtract, or subtract then add; the final answer is the same.
Representations	'Nina had 55 stickers. She gave 12 away. Then she got 4 more. How many stickers does she have now?' 55 - 12 + 4 = 47 55 - 12 = 43 43 + 4 = 47 Equivalent calculations: 45 + 17 - 5 = 57 45 + 17 = 62 62 - 5 = 57 45 - 5 + 17 = 57 45 - 5 = 40 40 + 17 = 57