DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
M	Mental: Add mentally by partitioning Main: Use column addition (expanded version, no carrying) Aut006	Mental: Model for children how to add mentally by partitioning e.g. to add 45 + 23, calculate 45 + 20 = 75, 75 + 3 = 78. Give children a few additions to calculate this way. Tell them not to write down their working out, only to write the answer, as this is a mental strategy Main: TA to take children who are unable to add a 1-digit number to a 2-digit number (e.g. 47 + 8) and / or are unable to add multiples of 10 (e.g. 40 + 20) Practice counting up to 100, especially focusing on crossing tens barriers Practice counting up to 100 in tens Calculate mentally by putting first number in head and counting on, using fingers to keep count Work on setting these questions out in columns and calculating them mentally Go through PowerPoint with the following: • Explanation of the difference between horizontal / vertical and what a column is • Example of how we will be setting out our work in 2 different ways for each question today (with partitioning and without partitioning – this reinforces the idea that without partitioning a 1 in the tens column is a ten, not just a unit): | 5	0	+	4		5	4
3	0	+	2	+	3	2
8	0	+	6		8	6 | With every example on following slides reinforce four main teaching points: ➢ Start on the right-hand side ➢ Put only 1 number in a square ➢ Write the + ➢ Put units under units and tens under tens and so on • Examples of adding covering differentiation below (After doing the example before the decimals, have middle and higher ability go and stick success criteria in their books) • Final slide with reminders of the 4 key points above (success criteria) Remind children to leave space between calculations and not squash them together Have a copy of the success criteria to stick at the top of their page on each child's desk (except for lower ability as they do not need to think about all of the criteria)	(At regular intervals have children stop and check their work against the success criteria) Lower ability – add 1-digit numbers and multiples of 10 (give unit squares and tens sticks if really needed) Middle ability – add 2-digit numbers (no carrying) Higher ability – add 3-digit numbers (no carrying) Extension – add 4-digit numbers and numbers to 1 decimal place (no carrying)	Have children self-asses their work against the success criteria In ability partners give children 1 question to do each Children need to talk to their partner, explaining what they are doing e.g. I will put the 3 under the 5 because they are both units. Then I will put the 40 under the 20 because they are both tens. Then I draw my equals line with a ruler. Then I start on the right and add the digits first and then add the tens Children swap over and partner who spoke first now listens

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY

Tu	Mental: Add mentally by partitioning
	
	Main: Use column addition (formal algorithm, with carrying)
	
	Aut007
		Mental:
		Model for children how to add mentally by partitioning e.g. to add 45 + 23, calculate 45 + 20 = 75, 75 + 3 = 78. Give children a few additions to calculate this way. Tell them not to write down their working out, only to write the answer, as this is a mental strategy
		
		Main:
		TA to take children who are unable to add a 1-digit number to a 2-digit number (e.g. 47 + 8) and / or are unable to add multiples of 10 (e.g. 40 + 20)
		Practice counting up to 100, especially focusing on crossing tens barriers
		Practice counting up to 100 in tens
		Calculate mentally by putting first number in head and counting on, using fingers to keep count
		Work on setting these questions out in columns and calculating them mentally
		Go through PowerPoint with the following:
		• Revise what column and vertical mean
		• Revise 4 key teaching points (see below)
		• Explanation of how when the units column is full i.e. has 10 units in it, these 10 units need to move next door to the tens and become 1 ten, with several examples
		• Go through examples of how to add 2-digit and 3-digit numbers e.g.
		
		1) 4 7 2) 2 3 9
		  + 2 5 + 5 2
		    7 2 2 9 1
		     1 1
		
		(With every example reinforce four main teaching points:
		➢ Start on the right-hand side
		➢ Put only 1 number in a square
		➢ Write the +
		➢ Put units under units and tens under tens and so on
		➢ Putting the 1 you carry in the correct column
		Middle and higher ability start work go to stick success criteria in books
		• Model for G+T how to use column addition with number with decimal places
		Remind children to leave space between calculations and not squash them together
		Have a copy of the success criteria to stick at the top of their page on each child's desk (except for lower ability as they do not need to think about all of the criteria)
			(At regular intervals have children stop and check their work against success criteria)
			
			Lower ability – add 1-digit numbers to 2-digit numbers (give number line if really cannot work without it)
			
			Middle ability – add 2-digit numbers (with carrying)
			
			Higher ability – add 3-digit numbers (with carrying)
			
			Extension – add 4-digit numbers and numbers with decimal places (with carrying)
				Have children self-asses their work against the success criteria
				In ability partners give children 1 question to do each
				Children need to talk to their partner, explaining what they are doing e.g. I will put the 6 under the 5 because they are both units. Then I will put the 40 under the 20 because they are both tens. Then I draw my equals line with a ruler. Then I start on the right and add the units first, carrying a ten and writing it under the tens, and then add the tens
				Children swap over and partner who spoke first now listens

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY

W	Mental: Subtract mentally by partitioning
	
	Main: To use column subtraction (expanded version, no borrowing)
	
	Aut008
		Mental:
		Model for children how to subtract mentally by partitioning e.g. to calculate 45 - 23, calculate 45 - 20 = 25, 25 - 3 = 22. Give children some subtractions to do this way. Tell them not to write down their working out, only to write the answer, as this is a mental strategy
		
		Main:
		TA to take children who are unable to subtract a 1-digit number from a 2-digit number (e.g. 47 - 6) and / or are unable to subtract multiples of 10 (e.g. 40 - 20)
		Practice counting down from 100, especially focusing on crossing tens barriers
		Practice counting down from 100 in tens
		Calculate mentally by putting first number in head and counting back, using fingers to keep count
		Work on setting these questions out in columns and calculating them mentally
		
		Go through PowerPoint with the following:
		• Explanation of the difference between horizontal / vertical and what a column is
		• Example of how we will be setting out our work in 2 different ways for each question today (with partitioning and without partitioning – this reinforces the idea that without partitioning a 1 in the tens column is a ten, not just a unit):
		• Subtracting 2-digit and 3-digit numbers e.g.
		
		    5 0 + 4 5 4
		 - 3 0 + 2 - 3 2
		    2 0 + 2 2 2
		
		(With every example reinforce four main teaching points:
		  ➤ Start on the right-hand side
		  ➤ Put only 1 number in a square
		  ➤ Write the -
		  ➤ Put units under units and tens under tens and so on
		• Examples of subtracting covering differentiation below
		 (After doing the example before the decimals, have middle and higher ability go and stick success criteria in their books)
		• Final slide with reminders of the 4 key points above (success criteria)
		Remind children to leave space between calculations and not squash them together
		Have a copy of the success criteria to stick at the top of their page on each child's desk (except for lower ability as they do not need to think about all of the criteria)
			(At regular intervals have children stop and check their work against success criteria)
			
			Lower ability – subtract 1-digit numbers and multiples of 10 (give units squares and tens sticks if really needed)
			
			Middle ability – subtract 2-digit numbers (no borrowing)
			
			Higher ability – subtract 3-digit numbers (no borrowing)
			
			Extension – subtract 4-digit numbers and numbers with decimal places (no borrowing)
				Have children self-asses their work against the success criteria
				In ability partners give children 1 question to do each
				Children need to talk to their partner, explaining what they are doing e.g. I will put the 3 under the 5 because they are both units. Then I will put the 40 under the 20 because they are both tens. Then I draw my equals line with a ruler. Then I start on the right and subtract the digits first and then subtract the tens
				Children swap over and partner who spoke first now listens

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
Th	Mental: Subtract mentally by partitioning Main: Use column subtraction (formal algorithm, with borrowing) Aut009	Mental: Model for children how to subtract mentally by partitioning e.g. to calculate 45 - 23, calculate 45 - 20 = 25, 25 - 3 = 22. Give children some subtractions to do this way. Tell them not to write down their working out, only to write the answer, as this is a mental strategy Main: TA to take children who are unable to subtract a 1-digit number from a 2-digit number that requires crossing tens barriers (e.g. 42 - 4) Practice counting down from 100, especially focusing on crossing tens barriers Practice counting down from 100 in tens Calculate mentally by putting first number in head and counting back, using fingers to keep count Work on setting these questions out in columns and calculating them mentally Go through PowerPoint with the following: • Revise what column and vertical mean • Revise 4 key teaching points (see below) • Explanation of how when the bottom number in a column is larger than the top number, you need to take a ten / hundred / thousand from the next column to the left, with several examples • Go through examples of how to subtract 2-digit and 3-digit numbers e.g. 1) $4^{1}2$ − 2 5 = 1 8 2) $28^{1}2$ − 5 7 = 2 2 5 (With every example reinforce four main teaching points: ➢ Start on the right-hand side ➢ Put only 1 number in a square ➢ Write the - ➢ Put units under units and tens under tens and so on ➢ Cross out the number you take from and write its replacement above it Middle and higher ability start work go to stick success criteria in books • Model for G+T how to use column subtraction with number with decimal places Remind children to leave space between calculations and not squash them together Have a copy of the success criteria to stick at the top of their page on each child's desk (except for lower ability as they do not need to think about all of the criteria)	(At regular intervals have children stop and check their work against the success criteria) Lower ability – subtract 1-digit numbers from 2-digit numbers (give number line if really needed) Middle ability – subtract 2-digit numbers (with borrowing) Higher ability – subtract 3-digit numbers (with borrowing) Extension – subtract 4-digit numbers and numbers with decimal places (with borrowing)	Have children self-asses their work against the success criteria In ability partners give children 1 question to do each Children need to talk to their partner, explaining what they are doing e.g. I will put the 6 under the 5 because they are both units. Then I will put the 20 under the 40 because they are both tens. Then I draw my equals line with a ruler. Then I start on the right and subtract the units first, borrowing a ten. I cross out the old tens number and write the new number in the tens, and then I subtract the tens Children swap over and partner who spoke first now listens

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
F	Mental: Add and subtract mentally by partitioning Main: Use column addition and subtraction (formal algorithm, with carrying / borrowing) Aut010	Mental: Revise adding and subtracting by partitioning and give children a few calculations to do using it Main: TA to take children who are unable to add / subtract a 1-digit number from / to a 2-digit number that requires crossing tens barriers (e.g. 48 + 4 or 42 - 4) Practice counting up and down from 100, especially focusing on crossing tens barriers Practice counting up and down from 100 in tens Calculate mentally by putting first number in head and counting on / back, using fingers to keep count Work on setting these questions out in columns and calculating them mentally Go through PowerPoint with the following: • Revise what column and vertical mean • Revise 4 key teaching points (see below) • Explanation of when the two digits in a column add up to 10 or more you need to carry a ten / hundred / thousand to the next column to the left • Explanation of how when the bottom number in a column is greater than the top number, you need to take a ten / hundred / thousand from the next column to the left • Go through examples of how to add and subtract 2-digit and 3-digit numbers e.g. 3 ... 7 1) 4¹2 2) 2 8¹2 – 2 5 ... – 5 7 1 8 ... 2 2 5 (With every example reinforce four main teaching points: ➢ Start on the right-hand side ➢ Put only 1 number in a square ➢ Write the + / - ➢ Put units under units and tens under tens and so on ➢ Carry / the ten / hundred / thousand or cross out the number you take from and write its replacement above it Middle and higher ability start work go to stick success criteria in books • Model for G+T how to use column addition and subtraction with number with decimal places Remind children to leave space between calculations and not squash them together Have a copy of the success criteria to stick at the top of their page on each child's desk (except for lower ability as they do not need to think about all of the criteria)	(At regular intervals have children stop and check their work against the success criteria) Lower ability – add and subtract 1-digit numbers from 2-digit numbers (give number line if really needed) Middle ability – add and subtract 2-digit numbers Higher ability – add and subtract 3-digit numbers Extension – add and subtract 4-digit numbers and numbers with decimal places	Have children self-asses their work against the success criteria In ability partners give children 1 question to do each Children need to talk to their partner, explaining what they are doing e.g. I will put the 6 under the 5 because they are both units. Then I will put the 20 under the 40 because they are both tens. Then I draw my equals line with a ruler. Then I start on the right and subtract the units first, borrowing a ten. I cross out the old tens number and write the new number in the tens, and then I subtract the tens Children swap over and partner who spoke first now listens

To access termly planning and all of the resources needed to teach these lessons visit

http://www.saveteacherssundays.com/maths/year-3/107/