Week	Main focus of teaching and activities each day	Starter	Outcomes and plenary for each day		
1	Mental skills for week:				
-	 partition into tens and units then recombine; 				
	•	Il numbers by putting the largest number first and/or by finding p	pairs totalling 0, 10 or 11. (starting with two		
	three numbers)	in numbers by putting the largest number hist and/or by muting p			
	 find a small difference by counting up from the smaller to the larger number; 				
	Vocabulary for week:				
	Addition and subtraction				
	Addition/Subtraction: Mentally,	addition, add, addition, more, plus, increase, sum, total, altogeth	ner, score, double, near double, how many		
	more to make? subtract, subtr	action, take (away), minus, decrease, leave, how many are left/le	eft over? difference between.		
	Estimate, rounding.				
	addition/subtraction	Day 1: Mental maths, no. bonds, times tables, facts & vocab	Day 1: Which is the odd one out?		
	Day 1: revise the words	Number fans –place value- greatest number with digit 3			
	used for addition and	and 7, lowest number with digits 2 and 9 etc.	Which is the odd one out?		
	subtraction- what happens		60 (6 tens)		
	to the answer (increase or	Day 2: Mental maths, no. bonds, times tables, facts & vocab	20 40		
	decrease)? rehearse simple	place value- using numbers with 100s and 10s venn for			
	2 digit +/- one digit. How can we do this?-	greater than/less than	(4 tens) (2 tens)		
	mentally?	Day 2: Montal mathe no hande times tables fasts 8 yearsh			
	Target p12	Day 3: Mental maths, no. bonds, times tables, facts & vocab revise 2x 5x 10x tables- in pairs			
	Talget piz				
	Day 2: adding and		Day 2: Spot the mistake. Explain your		
	subtracting tens- onus on		answer – RUCSAC.		
	which number is being				
	changed?				
	target p13				

	Day 3: adding and subtracting 100s- thinking of place value. Done practically for bottom 20%- p14			$ \begin{array}{c} \hline $
				Day 3: Fill in the missing numbers. 4300 = 400 $522 - 2_ = 512$ 4010 = 321 $321 - 1_ = 311$ 3500 = 300
2	 Use doubling to connect Develop efficient men Derive related multiplie Include missing number operations x 5 = 20 Pupils should be taught 	ct 2 and 10 times tables. al methods using commutation cation and division facts or statements. Use symbols t 3 x 2 = 30 2 x 2 = t to recall and use division facts	ivity o stand for unknown numbers	

	Addition/Subtraction: Mentally, addition, add, addition, more, plus, increase, sum, total, altoge more to make? subtract, subtraction, take (away), minus, decrease, leave, how many are left, Estimate, rounding.		
 addition/subtraction Day 1: column addition and subtraction- no exchanging. Progress to column addition with exchanging P24-25 Day 2: Column subtraction. Start with no exchanging and progress to-with exchanging. Using 3 digits p 26-27 Target Day 3: column subtraction in books- with exchanging p 26-27 	 Day 1: Mental maths, no. bonds, times tables, facts & vocab +/- multiples of 10 on number square (jumps) progress to 100s. Day 2: LONGER MENTAL SKILLS SESSION Mental maths, no. bonds, times tables, facts & vocab 2, 5, 10 xtable venn diagram- using 100 square for LA Day 3: Mental maths, no. bonds, times tables, facts & vocab place value partitioning practice- part whole models. Day 4: Mental maths, no. bonds, times tables, facts & vocab Partitioning 10s and 100s numbers in various ways. 	 Day 1: Word problem. RUCSAC. Jack has 521 pencils. Jack finds 139 more. How many does he have? Key words. Chloe has 398 rulers. She loses 123. How many does she have? Day 2: Mr Hancox's Shop. £1.20 rulers £5.90 books £2.75 fountain pen 	
Day 4: adding 1s across a ten. Practise partitioning 1 digit numbers in various ways- LA to use dienes/cubes. 86+9= Can we partition the 9 to make it easier when adding?		£13.00 top £20.00 jumper How much for a fountain pen and a book?	

	Progress to adding 10s	How much for a ruler and a top? etc.
	across 100	Day 3: True/False statement.
		Conversations – why? RUCSAC.
		Is the statement true or false?
		In this calculation, there will be no tens in the answer, because there are no tens in the numbers being added together. H T O B 3 0 5 + 6 0 7
		Explain your answer.
		Day 4: Explain the mistake. RUCSAC – reasoning.
		Tiny is working out 325 + 417
		Н Т О
		Explain Tiny's mistake. What is the correct answer?
3	Mental skills for week:	
	Odd and even numbers	
	 Count from 0 in multiples of 4, 8, 50 and 1 	100
		100

- Read and write numbers up to 1000 in numerals and in words
- 2x 4x 5x 10x tables
- Doubling and doubling again = 4x table
- Know the number of days in each month, year and leap year

Vocabulary for week:

PLACE VALUE: Units, ones, tens, hundreds, thousands, digit, one-, two-, three-digit number, place, place value, stands for, represents, the same number as, as many as, equal to, >, greater than, more than, larger than, bigger than, <, less than, fewer than, smaller than, \geq , greater than or equal to, \leq , less than or equal to, greatest, most, largest, biggest, least, fewest, smallest one... ten... one hundred... one thousand more/less, compare, order, size, ascending/descending order

Place value	Day 1: Mental maths, no. bonds, times tables, facts & vocab	Addition and subtraction
Day 1:. Exploring 100s-	counting in pairs- in 2s 5s 10s, 50s, 100s,	Day 1: Dienes. Which does not show
showing 100 block=100 but		100?
so does 10 10s.	Day 2: Mental maths, no. bonds, times tables, facts & vocab	Which picture does not show 23?
representing numbers to	counting in pairs in 4s and 8s- completed on 100 square	АВ
1000 using dienes. Pair	first- 100 square splat	
work- how many 10s?		
hundreds?- recognise the	Day 3: Mental maths, no. bonds, times tables, facts & vocab	
value of each digit in	making numbers using dienes in two different ways.	
numbers. Show with dienes	Day 4- Mental maths, no. bonds, times tables,facts & vocab	c c c c c c c c c c c c c c c c c c c
representation, expanded	using the digit cards to make 2 digit numbers reminding	
form Target p6	children we can only use a car once in one number.	
Day 2: partitioning using		
flexible partitioning using		How do you know?
part-whole models with		
numbers up to 1000. LA to		Day 2:
use dienes. Simple-		

	partitioning the 100s in various ways. 263= 200+60+3 263= 100+160+3	Who has made the number 315?
	Day 3: LONGER mental maths questions with digit cards. making numbers using the place value chart and place value counters. -ordering numbers to 1000 Using three digit cards can we make 5 different 3-digit numbers. Ordering from biggest to smallest, Ordering from smallest to biggest. Day 4: number lines- intervals, worth. Practise working out the intervals to be able to find the missing	 Image: Constraint of the second sec
4	numbers to 1000 Mental skills for week: Add numbers mentally including: a three digit number and ones a three digit number and tens a three digit number and tens a three digit number and hundreds	

Partition all numbers and recombine, start with TU + TU then HTU + TU Subtract numbers mentally, including: a three digit number and ones a three digit number and tens a three digit number and hundreds.						
				Use a number line, dienes, hundred squares, two hundred		
				squares, and similar represen	tations, to support mental	
				calculations.		
				MONEY coin, note, price, cost, s	pend, spent, pay, change, dear, costs more, more/most expensiv	eft over? difference between. e, cheap, costs less, cheaper, less/least
expensive, how much? how m Addition and subtraction Day 1: Mrs Carter/Mr	 any? total, amount, value, worth, discount, profit, loss, currenc Day 1: adding /subtracting numbers ending in 9. +/- 10 and adjust with 1. Practise doing this mentally wit large 	e, cheap, costs less, cheaper, less/least				
expensive, how much? how m Addition and subtraction Day 1: Mrs Carter/Mr Hancox's shop.	any? total, amount, value, worth, discount, profit, loss, currenc Day 1: adding /subtracting numbers ending in 9.	e, cheap, costs less, cheaper, less/least y. Addition and Subtraction Day 1: Teacher feedback				
expensive, how much? how m Addition and subtraction Day 1: Mrs Carter/Mr	 any? total, amount, value, worth, discount, profit, loss, currenc Day 1: adding /subtracting numbers ending in 9. +/- 10 and adjust with 1. Practise doing this mentally wit large number square. Chn to use 100 sq Day 2: LONGER MENTAL SKILLS SESSION Mental maths, no. bonds, times tables, facts & vocab ordering money that using £ and p. Making sure we use our place value 	e, cheap, costs less, cheaper, less/least y. Addition and Subtraction Day 1: Teacher feedback				
expensive, how much? how m Addition and subtraction Day 1: Mrs Carter/Mr Hancox's shop. Column addition to find the total price- £ and p. Insistence on decimal points lining up like shirt buttons.	 any? total, amount, value, worth, discount, profit, loss, currenc Day 1: adding /subtracting numbers ending in 9. +/- 10 and adjust with 1. Practise doing this mentally wit large number square. Chn to use 100 sq Day 2: LONGER MENTAL SKILLS SESSION Mental maths, no. bonds, times tables, facts & vocab ordering money that 	e, cheap, costs less, cheaper, less/least y. Addition and Subtraction Day 1: Teacher feedback Day 2: Word problems using RUCSA Emphasis on the vocabulary – underline. As a class.				
expensive, how much? how m Addition and subtraction Day 1: Mrs Carter/Mr Hancox's shop. Column addition to find the total price- £ and p. Insistence on decimal points	 any? total, amount, value, worth, discount, profit, loss, currenc Day 1: adding /subtracting numbers ending in 9. +/- 10 and adjust with 1. Practise doing this mentally wit large number square. Chn to use 100 sq Day 2: LONGER MENTAL SKILLS SESSION Mental maths, no. bonds, times tables, facts & vocab ordering money that using £ and p. Making sure we use our place value 	e, cheap, costs less, cheaper, less/least y. Addition and Subtraction Day 1: Teacher feedback Day 2: Word problems using RUCSA Emphasis on the vocabulary –				

	Day 3: longer reasoning		
	session Using number lines		
	to find the difference.		
	2 step- find the total first		
	(column) then number line		
	to count up to find the		
	difference		
	Day 4: continuing from day		
	3 Half-termly times table		
	check up		
5	Mental skills for week:		
	Add numbers mentally including:		
	a three digit number and ones		
	a three digit number and tens		
	a three digit number and hundreds		
	Partition all numbers and recombine, start with TU + TU then HTU + TU		
	Subtract numbers mentally, including:		
	a three digit number and ones		
	a three digit number and tens		
	a three digit number and hundreds.		
	Use a number line, dienes, hundred squares, two hundred		
	squares, and similar representations, to support mental		
	calculations.		
	Vocabulary for week:		

more to make? subtract, subtraction, tak Estimate, rounding. MONEY coin, note, price, cost, spend, spen	 Addition/Subtraction: Mentally, addition, add, addition, more, plus, increase, sum, total, altogether, score, double, near double, how many more to make? subtract, subtraction, take (away), minus, decrease, leave, how many are left/left over? difference between. Estimate, rounding. MONEY coin, note, price, cost, spend, spent, pay, change, dear, costs more, more/most expensive, cheap, costs less, cheaper, less/least expensive, how much? how many? total, amount, value, worth, discount, profit, loss, currency. 		
<i>Estimating and rounding</i> Day 1: introducing our strategy- look at the correct place value, <i>5-9 climb</i> <i>the vine, 1-4 stay on the floor.</i> Rounding 2 digit and 3 digit numbers to	Day 1: Children work in pairs to shuffle a pack of 20 cards consisting of 2 of each number 0 to 9. One child turns over the top 2 cards. The first child to say the total wins them. Continue until there are no cards left. Who won most? Repeat.	Day 1: Rounding 4-digit numbers. Is the same process? Discuss. Day 2: Estimating 3-digit addition and subtraction problems.	
 the nearest 10/100 Day 2:arithmetic test using rounding knowledge to estimate on a number line Day 3: longer reasoning session estimating answers to + and – but using rounding. reasoning using estimating and rounding 	Day 2: Round 3-digit numbers to nearest 10 and 100 Use a random number generator such as at <u>https://www.google.com/search?q=random+number</u> to generate numbers between 100 and 1000. Children work in pairs, one to round the number to the nearest 100 and the other to the nearest 10, holding up the answers on their whiteboards. Give 0 to 1000 landmarked lines (<i>see below</i>) to any children who need some visual support for rounding to the nearest 100.	 Day 3: Estimating 4-digit addition and subtraction problems using the same process. Day 4: Continue as the lesson. Day 5: Continue as the lesson. 	
Estimate the answer to 482-194 482 is close to 500 194 is close to 200 500 – 200 = 300 Day 4: reasoning test	Day 3: Round amounts of money to the nearest pound (pre-requisite skills) Children each draw a £1s, 10ps and 1ps place value grid. They shuffle a pack of 1–9 cards, take 3 and place in the grid. They round the amount of money to the nearest pound. Repeat. How many can they create and round in 5 minutes? Day 4: Subtract single-digit numbers		

		 Children play in a group. The first person rolls a 0 to 9 dice and subtracts the number rolled from 100. The next person rolls the dice and subtracts the number from the previous answer. The first Day 1: Mental addition – using hundreds board for support. 	
		Day 2: Number fans – timestables (2, 4, 5, 10)	
		Day 3: Dice roll – subtraction. 2 digit – 1 digit.	
		Day 4: Arithmetic style questions on addition and subtraction.	
6	Mental skills for week:		
	Add numbers mentally including:		
	a three digit number and ones		
	a three digit number and tens		
	a three digit number and hundreds		
	Partition all numbers and recombine, start with TU + TU then HTU + TU		
	Subtract numbers mentally, including	5.	
	a three digit number and ones		
	a three digit number and tens		
	a three digit number and hundreds.		
	Use a number line, dienes, hundred s	squares, two hundred	
	squares, and similar representations,	to support mental	
	calculations.		

Vocabulary for week: Addition/Subtraction: Mentally, addition, add, addition, more, plus, increase, sum, total, altogether, score, double, near double, how many more to make? subtract, subtraction, take (away), minus, decrease, leave, how many are left/left over? difference between. Estimate, rounding. MONEY coin, note, price, cost, spend, spent, pay, change, dear, costs more, more/most expensive, cheap, costs less, cheaper, less/least expensive, how much? how many? total, amount, value, worth, discount, profit, loss, currency.			
 Addition and Subtraction- Inverse	Day 1: Mental addition – using hundreds board	Day 1: Word problems as of the	
<u>operations</u>	for support.	Autumn Reasoning. q.19 and 20.	
Day 1: missing number questions-			
strategy to solve.	Day 2: LONGER MENTAL SKILLS SESSION Mental	Day 2: part-whole model to show	
	maths, no. bonds, times tables,facts & vocab	working out and different ways to	
Day 2:	Number fans – timestables (2, 4, 5, 10)	represent.	
Using the inverse to check if correct.			
What number sentence would we	Day 3: Arithmetic style questions on addition and	Day 3: Represent as bar models. Is	
need? Can we complete this? Are the	subtraction.	it the same process?	
answers the same	Dev & Mar Contended Marthemands share arounding		
	Day 4: Mrs Carter's/ Mr Hancox's shop- rounding	Day 4: Continue as the lesson with	
Day 3:Rising stars arithmetic	prices to the nearest 50p/£1	reasoning.	
number families- Using the correct			
operation to complete the family.		Day 5: Continue as the lesson with	
Can we write all number sentences to complete the number family?		problem solving.	
Represent in other ways: part whole			
model, number family triangle,			
Day 4: reasoning using inverse			
operations			

problem solving: completing 2 step problems and checking the answer using inverse ops	