



Mount Charles Addition and Subtraction Key Objective K-Knowledge S-Skills

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Number line	Number bonds	10 more	multiple approx.	strategy efficient	Distance chart	Order of operations
	Add, more, plus,	Inverse	10 less	approximately	accurate	Efficient written	
	make, sum, total,	Near doubles	Partition	column addition and	exact	method	
	altogether	Difference between	Calculate mentally	subtraction	diagram		
	Double Half, halve	How many fewer					
	Equals, is the same	isthan?					
	(including equals	How much less is?					
	sign)	plus					
	How many more to	part-whole model					
	make? How many	whole					
	more is,,, then,,,?	part					
	How much more	number sentence					
	is?	altogether					
	Subtract, take	in total					
	away, minus.	count on missing					
		part					
		How many are left?					
		in total					
		taken away subtract					
		part					
		subtraction addition					
lan		count backwards					
pq		How many more?					
oca		count on					
New Vocabulary		Predict					
le V		Take away					
	-	Fact family					
	Shows awareness	represent and use	recall and use addition				
Ē	that numbers are	number bonds and	and subtraction facts to				
Number Bonds	made up	related subtraction	20 fluently, and derive				
Vur 3on	(composed) of	facts within 20	and use related facts up				
2 Ш	smaller numbers,		to 100				





		_	T	T		E COLORAGE
	exploring	K – value of numbers				
	partitioning in different waysto 20 K- number bondsK - numbers to 100 K - addition facts to 20					
with a wide range within		within 20	K- subtraction facts to 20			
	of objects	S – use concrete	K – value of 2 digit			
		resources to add and	numbers up to 100			
		subtract	S – recall addition facts to			
		S – represent	20			
		number bonds and	S – recall subtraction facts			
		related subtraction	to 20			
		facts pictorially	S – derive facts up to 100			
	In practical	add and subtract	add and subtract	add and subtract	add and subtract	perform mental
	activities, adds one	one-digit and two-	numbers using concrete	numbers mentally,	numbers mentally	calculations,
	and subtracts one	digit numbers to 20,	objects, pictorial	including:	with increasingly	including with mixed
	with numbers to	including zero	representations, and	* a three-digit	large numbers	operations and large
	10		mentally, including:	number and	K – a variety of	numbers
		K – value of numbers	* a two-digit number	ones	methods for adding	K – variety of
		to 20	and ones	* a three-digit	and subtracting	methods for
		K – the value of zero	* a two-digit number	number and tens	mentally	performing mental
		S – counting on and	and tens	* a three-digit	K – value of large	calculations
		counting back in 1s	* two two-digit	number and	numbers	K – order of
		S – counting on and	numbers	hundreds	K – use known facts	operations
		counting back in 10s	* adding three one-digit		and the powers of	K – use known facts
		S- counting through	numbers		10, 100 or 1000 to	and powers of 10,
		10	K – value of numbers to	K – value of 3 digit	calculate mentally	100 or 1000 to
			100	numbers	S – partitioning to	calculate mentally
			K – subitising	K – counting on and	enable adding and	S – use order of
			S – counting on and	counting back in	subtraction	operations correctly
		read, write and	counting back in 1s	ones, tens and	S – choose	S – choose
on		interpret	S – counting on and	hundreds mentally	appropriate	appropriate methods
lati		mathematical	counting back in 10s	numbers	methods to add	to calculate mentally
Cu		statements	S- counting through 10	K – variety of	and subtract with	
cal		involving addition		methods for bridging	increasingly large	
Mental calculation		(+), subtraction (-)	show that addition of two	10 or 100	numbers	
len		and equals (=) signs	numbers can be done in			use their knowledge
2			any order (commutative)			of the order of





		(appears also in	and subtraction of one	S - partitioning to			operations to carry
		Written Methods)	number from another	enable counting on			out calculations
			cannot	or counting back			involving the four
		K- addition is	K – addition can happen in	S – use appropriate			operations
		represented by +	any order	mental method to			K – order of
		K – subtraction is	K – subtraction is not	add and subtract:			operations
		represented by –	commutative	- a 3 digit number			S – carry out
		K – equals sign =	S – choosing an	and ones			calculations involving
		means the same as	appropriate order for	- a 2 digit number			four operations
		K – know how to use	adding based on the	and tens			Tour operations
		and form +, - and =	numbers	a 3 digit number and			
		correctly	S – using concrete objects	hundreds			
		S – read, write and	and pictorial	Hulluleus			
		interpret	representations show that				
		mathematical	addition is commutative				
		statements	and subtraction is not.				
	Begins to explore	read, write and	and subtraction is not.	add and subtract	add and subtract	add and subtract	
	and work out	interpret		numbers with up to	numbers with up to	whole numbers	
	mathematical	mathematical		three digits, using	4 digits using the	with more than 4	
	problems, using	statements		formal written	formal written	digits, including	
	signs and	involving addition		methods of	methods of	using formal	
	strategies of their	(+), subtraction (-)		columnar addition	columnar addition	written methods	
	own choice,	and equals (=) signs		and subtraction	and subtraction	(columnar addition	
	including (when	(appears also in		K - value of numbers	where appropriate	and subtraction)	
	appropriate)	Mental Calculation)		with up to 3 digits	K – a variety of	,	
	standard	,		K – how to use the	methods for addition	K – a variety of	
	numerals, tallies	K- addition is		formal written	and subtraction with	methods for	
	and + or - • Shows	represented by +		method of columnar	up to 4 digits	addition and	
	awareness that	K – subtraction is		addition and	K – when to choose	subtraction with	
ω.	numbers are made	represented by –		subtraction	to use a written	more than 4 digits	
Ö	up (composed) of	K – equals sign =		K – how to use	method and when to	K – when to choose	
eth	smaller numbers,	means the same as		formal written	use a mental	to use a written	
Written Methods	exploring	K – know how to use		methods involving	method.	method and when	
	partitioning in	and form +, - and =		exchange	S – set out formal	to use a mental	
/rit	different ways	correctly		S – set out formal	methods of	method.	
>				methods of	columnar addition		





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with a wide range	S – read, write and	columnar addition	and subtraction with	S – set out formal	
of object	interpret	and subtraction with	up to 4 digits	methods of	
	mathematical	up to 3 digits	correctly.	columnar addition	
	statements involving	correctly.	S – solve addition	and subtraction	
In practical	+,- and =	S – solve addition	and subtraction	with more than 4	
activities, adds one	,	and subtraction	calculations where	digits correctly.	
and subtracts one		calculations where	exchanging is	S – solve addition	
with numbers to		exchanging is	necessary in at least	and subtraction	
10		necessary in at least	1 column	calculations where	
		1 column	S – solve subtraction	exchanging is	
		S – solve subtraction	calculations involving	necessary in at	
		calculations involving	exchanging where	least 1 column	
		exchanging where	there is a zero in the	S – solve	
		there is a zero in the	10s and 100s column	subtraction	
		10s column	S – chose an	calculations	
		103 Column	appropriate method	involving	
			for the calculation	exchanging where	
			based on the	there is a zero in	
			numbers.	the 10s, 100s or	
			Hullibers.	•	
				1000s column	
				S – know a variety	
				of mental methods	
				for addition and	
				subtraction	
				S – chose an	
				appropriate	
				method for the	
				calculation based	
				on the numbers.	





Inverse operations, estimation and checking answers			recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. K – inverse relationship between addition and subtraction S – how to use the inverse relationship between addition and subtraction to check calculations S – use concrete and pictorial representations to explain the relationship between addition and subtraction S – solve missing number problems	estimate the answer to a calculation and use inverse operations to check answers K – mental calculation methods for addition, subtraction, multiplication and division K – inverse relationship between multiplication and division K – value of numbers S – use appropriate inverse operation for the calculation S – estimate the answer to a calculation	estimate and use inverse operations to check answers to a calculation same as Year 3	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy K – how to round numbers to a required degree of accuracy K – variety of contexts where rounding an answer is appropriate S- rounding numbers based on the context of the problem	use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. K- how to use rounding to estimate answers S – use estimation to check answers to the calculations
Problem Solving	Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three	solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = 2 - 9	solve problems with addition and subtraction: * using concrete objects and pictorial representations, including those involving numbers, quantities and measures	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	solve addition and subtraction two- step problems in contexts, deciding which operations and methods to use and why K – range of mental and written methods	solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why K – variety of methods for	solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why Same as Year 5





					4 Course Al
	* applying their	K – confident	for addition and	addition and	
K – understand	increasing knowledge	knowledge of	subtraction	subtraction	
addition and	of mental and written	number facts and	K – range of context	K – wide range of	
subtraction	methods	place value.	where adding and	contexts where	
K – how to use		K – how to calculate	subtraction would be	adding or	
concrete objects and	K – range of mental and	more complex	necessary	subtraction would	
pictorial	written methods of	addition and	S – use pictorial or	be necessary	
representations to	calculation	subtraction	abstract	S – to use	
represent a problem	S - solve problems with	S - solve problems,	representations to	appropriate	
K – purpose of equal	addition and subtraction:	including missing	show each step	abstract	
sign = and how it can	using concrete objects	number problems,	required	representations to	
be used in different	and pictorial	using number facts,	S – to understand	show all the steps	
places in a	representations,	place value, and	the steps required to	required	
calculation	including those	more complex	solve a problem	S – to understand	
S – add and subtract	involving numbers,	addition and	S – choose the	the steps required	
accurately	quantities and	subtraction	appropriate method	to solve a problem	
S – represent a	measures		to solve a problem.	S – choose the	
problem using	* applying their			appropriate	
concrete objects and	increasing knowledge			methods to solve a	
pictorial	of mental and written			problem	
representations	methods			S – explain why one	
S- solve one-step				method is more	
missing number				appropriate than	
problems				the other	