



Mount Charles
Place Value and Number
Key Objective. K-Knowledge S-Skill

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
New Vocabulary	Number One, two, three to twenty and beyond None Count on/up/to/from/down Before, after More, less, many, few, fewer, fewest, smaller, smallest Equal to, the same as Odd, even Digit Numeral Compare Order Size Value Between, halfway between	tens (10s) ones (1s) more fewer order smallest 100 square number square place value grid sort group number track digit pattern one more one less matched fewer greater than (>) less than (<) equal to (=) most least fewest greatest number line tens (10s) ones (1s) more fewer order smallest	Numbers to one hundred Hundreds Partition, recombine Hundred more/less	Estimate Exchange Numbers to one thousand	Nearest Step Descending Ascending Tenths Hundredths Decimal (places) Round (to nearest) Thousand more/less than Negative numbers Count through zero Roman numerals (I to C)	million step descending ascending nearest Powers of 10	Numbers to ten million



Counting	<p>Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0 Counts out up to 10 objects from a larger group</p> <ul style="list-style-type: none">Engages in subitising numbers to four and maybe five <p>Increasingly confident at putting numerals in order 0 to 10 (ordinality) Matches the numeral with a group of items to show how many there are (up to 10)</p>					<p>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>K - when negative numbers are used (Temperature) K – how to read negative numbers</p> <p>S – counting forwards and backwards through zero</p> <p>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p> <p>K – multiply by 10,100, 1000, 10 000, 100 000 K - order of numbers to 1 000 000 S – counting forwards and backwards to 1 000 000 S – multiplying any number by 10, 100, 1000, 10 000, 100 000</p>	<p>use negative numbers in context, and calculate intervals across zero</p> <p>K - when negative numbers are used (Temperature) K – how to read negative numbers</p> <p>S – using a number line to calculate intervals S</p>
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Comparing number	Uses number names and symbols when comparing numbers, showing interest in large numbers	use the language of: equal to, more than, less than (fewer), most, least K – meaning of vocab: equal to, more than, less than (fewer), most, least S -using the above vocab correctly	compare and order numbers from 0 up to 100; use <, > and = signs K – value of numbers to 100 K- meaning of <, > and = signs S – compare numbers using <,> and + signs S – order numbers from 0 - 100	compare and order numbers up to 1000 K – value of numbers to 1000 S – compare numbers to 1000 K – order numbers to 1000	order and compare numbers beyond 1 000 K – value of numbers beyond 1000 S – compare numbers beyond 1000 S – order numbers beyond 1000	read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers) K – place value headings for the place value chart to 1 million K – correct spellings for numbers to 1 million S- read numbers to at least 1 million S – write numbers to at least 1 million S – order and compare numbers to at least 1 million S – give the value of any digit in a number to 1 million	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers) K – place value headings for the place value chart to 10 million K – correct spellings for numbers to 10 million S- read numbers to at least 01 million S – write numbers to at least 10 million S – order and compare numbers to at least 10 million



							S – give the value of any digit in a number to 10 million
Identifying, representing and estimating numbers	Uses number names and symbols when comparing numbers, showing interest in large numbers Estimates of numbers of things, showing understanding of relative size	identify and represent numbers using objects and pictorial representations including the number line K – value of numbers K – each number formation and name S – identify numbers using objects and pictorial representations S – represent numbers using objects and pictorial representations	identify, represent and estimate numbers using different representations, including the number line K – meaning of estimate K – how to make a logical estimation S- estimate numbers using different representations. S- identify, represent and estimate numbers	identify, represent and estimate numbers using different representations	identify, represent and estimate numbers using different representations		



			using different representations.				
Reading and writing numbers (including Roman Numerals)		<p>read and write numbers from 1 to 20 in numerals and words.</p> <p>K – names for each numeral K – which numerals represent each number from 1- 20</p> <p>S – to form each numeral correctly S – to write numbers 10 to 20 in numerals S – to read numbers from 1 to 20</p>	<p>read and write numbers to at least 100 in numerals and in words</p> <p>K – which numerals represent each number to at least 100 K – value of each digit in a number up to, and including 3 digits</p> <p>S – to write numbers 10 to 100 in numerals S – to read numbers from 1 to at least 100</p>	<p>read and write numbers up to 1000 in numerals and in words</p> <p>K – which numerals represent each number to 1000 K - value of each digit in a number up to 4 digits S- to write numbers up to 1000 S -to read numbers up to 1000</p> <p><i>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</i></p>	<p>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</p>	<p>read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers) K – which numerals represent each number to at least 1 million K - value of each digit in a number up to 7 digits S- to write numbers up to at least 1 million S -to read numbers up to at least 1 million.</p> <p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p> <p>K – Roman numerals to 1000 K – how to read numbers following the Roman numeral system</p>	<p>read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Understanding Place Value)</p> <p>K – which numerals represent each number to 10 million K - value of each digit in a number up to 8 digits S- to write numbers up to 10 million S -to read numbers up to 10 million.</p>



(copied from
Measurement

K – Roman’s
represented
numerals in different
ways.
K – the Roman
numerals to 100
K – how to read
numbers following
the Roman numeral
system
S – read Roman
numerals to 1000

S- read Roman
numerals to 1000



Understanding Place value			<p>recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>K – value of numerals K – each digit has a different value in a 2 digit number</p> <p>S – recognize the place value of each digit in a 2 digit number</p>	<p>recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p> <p>K – each digit has a different value in a 3 digit number</p> <p>S – recognize the place value of each digit in a 3 digit number</p>	<p>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>K – each digit has a different value in a 4 digit number</p> <p>S – recognize the place value of each digit in a 4 digit number</p> <p><i>find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths (copied from Fractions)</i></p>	<p>read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)</p> <p>K – which numerals represent each number to at least 1 million K - value of each digit in a number up to 7 digits S- to write numbers up to at least 1 million S -to read numbers up to at least 1 million.</p> <p><i>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (copied from Fractions)</i></p>	<p>read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)</p> <p>K – which numerals represent each number to 10 million K - value of each digit in a number up to 8 digits S- to write numbers up to 10 million S -to read numbers up to 10 million.</p> <p>identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up</p>



							to three decimal place
Rounding,					round any number to the nearest 10, 100 or 1 000 K – uses for rounding in real life K – where any number to 10 000 lies on number line S – to know the relevant closest multiples of 10, 100 or 1000 depending on the number being rounded	round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000 K – where any number to 100 000 lies on number line S – to know the relevant closest multiples of 10, 100, 1000, 10 000 or 100 000 depending on the number being rounded	round any whole number to a required degree of accuracy K – where any number lies on a number line S – to round any whole number to a required degree of accuracy <i>solve problems which require</i>



					<p>S – to round any number to the nearest 10, 100 or 1000</p> <p><i>round decimals with one decimal place to the nearest whole number (copied from Fractions)</i></p>	<p>S – to round any number to the nearest 10, 100, 10 000 or 100 000</p> <p><i>round decimals with two decimal places to the nearest whole number and to one decimal place (copied from Fractions)</i></p>	<p>answers to be rounded to specified degrees of accuracy (copied from Fractions)</p>
Problem solving			<p>use place value and number facts to solve problems</p> <p>K – value of 2 digit numbers K – order of 2 digit numbers K – multiples of 2,3,5 and 10 K – how to use <, > and = to compare numbers S – apply the above knowledge to solve problems</p>	<p>solve number problems and practical problems involving these ideas.</p> <p>K – value of 3 digit numbers K – order of 3 digit numbers K – multiples of 4,8,50 and 100 K – add or subtract 10 or 100 to any number S – apply the above knowledge to solve problems</p>	<p>solve number and practical problems that involve all of the above and with increasingly large positive numbers</p> <p>K – value of 4 digit numbers K – order of 4 digit numbers K – multiples of 6,7,9 25, 1000 K – add or subtract 1000 to any number K – read Roman Numerals to 100 K – round numbers to the nearest 10, 100 or 1000 K - count forwards and backwards through zero</p>	<p>solve number problems and practical problems that involve all of the above</p> <p>K – value of 8 digit numbers K – order of 8 digit numbers K – read and write numbers to at least 1 000 000 K – read Roman Numerals to 1000 K – interpret negative numbers in context K – round numbers to the nearest 10, 100, 1000, 10 000 or 100 000. K - count forwards and backwards through zero</p>	<p>solve number and practical problems that involve all of the above</p> <p>K – value of 8 digit numbers K – order and compare numbers to at least 10 million K – read and write numbers to at least 10 000 000 K –use negative numbers in context and calculate intervals across zero K – round numbers to any given accuracy.</p>



					S – apply the above knowledge to solve problems	S – apply the above knowledge to solve problems	S – apply the above knowledge to solve problems
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