

MIDDLETON PARISH CHURCH SCHOOL

Mathematics Progression Map: Number – Number and Place Value

Key Concepts	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
COUNTING	count to and across			count backwards	interpret negative	use negative numbers in
	100, forwards and			through zero to	numbers in context,	context, and calculate
	backwards,			include negative	count forwards and	intervals across zero
	beginning with 0 or			numbers	backwards with	
	1, or from any given				positive and negative	
	number				whole numbers,	
					including through zero	
	count, read and	count in steps of 2,	count from 0 in	count in multiples of	count forwards or	
	write numbers to	3, and 5 from 0,	multiples of 4, 8, 50	6, 7, 9, 25 and 1000	backwards in steps of	
	100 in numerals;	and in tens from	and 100;		powers of 10 for any	
	count in multiples of	any number,			given number up to	
	twos, fives and tens	forward or			1000 000	
		backward				
	given a number,					
	identify one more					
	and one less					
COMPARING	use the language of:	compare and order	compare and order	order and compare	read, write, order and	read, write, order and
NUMBERS	equal to, more than,	numbers from 0 up	numbers up to 1000	numbers beyond 1	compare numbers to	compare numbers up to
	less than (fewer),	to 100; use <, > and		000	at least 1 000 000 and	10 000 000 and
	most, least	= signs		compare numbers with	determine the value of	determine the value of
				the same number of	each digit	each digit (appears also in
				decimal places up to	(appears also in Reading	Reading and Writing
				two decimal places	and Writing Numbers)	Numbers)
				(copied from Fractions)		

IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS	identify and represent numbers using objects and pictorial representations including the number line	identify, represent and estimate numbers using different representations, including the number line	identify, represent and estimate numbers using different representations	identify, represent and estimate numbers using different representations		
READING AND WRITING NUMBERS (Including Roman Numerals)	read and write numbers from 1 to 20 in numerals and words.	read and write numbers to at least 100 in numerals and in words	read and write numbers up to 1000 in numerals and in words tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (copied from Measurement)	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.	read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers) read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Understanding Place Value)
UNDERSTANDING PLACE VALUE		recognise the place value of each digit in a two-digit number (tens, ones)	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) 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)	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) recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (copied from Fractions)	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) 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

ROUNDING			round any number to the nearest 10, 100 or 1000	round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000	round any whole number to a required degree of accuracy
			round decimals with one decimal place to the nearest whole number (copied from Fractions)	round decimals with two decimal places to the nearest whole number and to one decimal place (copied from Fractions)	solve problems which require answers to be rounded to specified degrees of accuracy (copied from Fractions)
PROBLEM SOLVING	use place value and number facts to solve problems	solve number problems and practical problems involving these ideas.	solve number and practical problems that involve all of the above and with increasingly large positive numbers	solve number problems and practical problems that involve all of the above	solve number and practical problems that involve all of the above