PARK AND PARKWALL FEDERATION MATHEMATICS VOCABULARY PROGRESSION

This document is a progression in the vocabulary of the primary mathematics curriculum across our two schools. Only the new vocabulary for each year group is listed. This document will support schools to ensure that the pitch of the vocabulary is correct for each year group and consistent throughout.

Vocabulary for numbers, place value and four rules of calculation.

	Numbers	Place Value	Addition	Subtraction	Multiplication	Division
EYFS	zero number one, two, three … to twenty and beyond teens numbers, eleven, twelve … twenty first, second, third… count, count (up) to, count on (from, to), count back (from, to) count in ones, is the same as more, less odd, even few pattern pair subitise	ones the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less compare last, last but one before, after next between guess how many …? about the same as just over, just under too many, too few enough, not enough teens balance equal	number sentence add, more, and make total altogether double one more how many more to make …? how many more is … than …? how much more is …? equals balances	number sentence take away how many are left/left over? how many have gone? one less how many fewer is … than …? how much less is …? difference between equals balances	double doubling sets of pairs number patterns objects groups	half of halving share between sharing equal groups sets fair

	Numbers	Place Value	Addition	Subtraction	Multiplication	Division
Y1	twenty-one, twenty-two … one hundred numeral thirty forty fifty sixty seventy eighty ninety hundred	Digit number/ numeral same tens and ones more than/less than less most/least count from ... count in .... forwards/backwards number pattern odd even equal sign = greater than/ smaller than fewer/ fewest largest smallest least equal to many number bonds/pairs missing numbers estimate nearly close to	add addition sum total altogether double one more two (ten) more plus equals near double is the same as number bonds/pairs missing number count up	how many more? leave how many left? two less ten less how many fewer minus subtract subtraction count up count back	multiplication multiplied by multiply lots of groups of **scaling** twice times as ... **array** multiple count up	share into division dividing grouping count back unequal equal

	Numbers	Place Value	Addition	Subtraction	Multiplication	Division
Y2	thousand count on in 3s, tally twenty-first, twenty-second … **fluency**	greater than, >
less than, <
equal (to), =
column
partition
most/greatest
number pattern
equivalent to
multiple of	increase
partition
fact family
renaming
partitioning
bridging
empty box
inverse
ten more
number bonds for 20
number bonds within 20
check	difference
between
equals
is the same as
minus
order
renaming
partition
ten less
check
inverse	times table
multiplication
row
column
fact family
odd
even
multiplication fact
multiplication table
repeated addition
multiple of 2
multiple of 5
multiple of 10
multiply	array
row column
fact family
inverse
divide, divided by, divided into
left, left over
repeated subtraction
split

	Numbers	Place Value	Addition	Subtraction	Multiplication	Division
Y3	ones tens hundreds thousands three digit number tenths	exact position estimate decimal approximate descending ascending **integer** round represent	100 more increase column digit column addition mental method formal method adjusting estimate written method boundary adjust near double **combine** rounding empty box	100 less decrease renaming number sentence calculate column subtraction estimate mental method formal method fact family adjust empty box	missing number **scaling** multiplied by ... times larger/smaller **product** times table facts fact family partition grid empty box	missing number times table remainder partition fact family inverse operation empty box
Y4	1 I 2 II 3 III 4 IV 5 V 6 VI 7 VII 8 VIII 9 IX 10 X 50 L 100 C 500 D 1000 M 4 digit number thousand ten thousand hundred thousand hundredths	Roman Numerals round negative convert positive **factor** **factor pair** **multiple**	decimal addition	decimal subtraction	factor factor pair expanded method compact method	factor factor pair

	Numbers	**Place Value**	**Addition**	**Subtraction**	**Multiplication**	**Division**
Y5	millions thousandths mixed number square number cube number prime number **composite number** decimals with 2 and 3 decimal places	prime common factor common multiple squared cubed integer decimal improper fraction mixed number percentage %	approximate	approximate	prime number **composite number** multiple common factor common multiple square number cube number squared, cubed long multiplication expanded method multiplier	compact short scale down test of divisibility **quotient** **divisor** **dividend**
Y6	millions billions	sequence pattern term first term etc. rule proportion ratio **power of 10**	formula term order of operations BIDMAS mean brackets average	formula term order of operations BIDMAS brackets	approximate formula term order of operations brackets	brackets balance order of operations BIDMAS

Key: each word or phrase highlighted in red has been identified as either vitally important throughout the school and used frequently, not currently being used effectively or new vocabulary.

Vocabulary for Fractions, Decimals and Percentages

	Fractions	Decimals	Percentage	Ratio & proportion
EYFS	share			
Y1	half two quarters, quarter, three quarters equal parts equal groups quantity object one whole			
Y2	third equivalence			
Y3	fifth, sixth, seventh, eighth, ninth, tenth two thirds tenths divided by ten unit fraction numerator denominator equivalent fraction discrete set diagram add/subtract within one whole	decimal point		
Y4	hundredth divided by 100 non- unit fraction common equivalent fractions	decimal equivalent decimal places rounding		
	Fractions	**Decimals**	**Percentages**	**Ratio and Proportion**
Y5	improper fraction mixed number proper fractions thousandths convert	decimal fraction nearest whole number	per cent symbol % number of parts per hundred percentage percentage equivalent	
Y6	simplest form	degree of accuracy		relative size quantity scale factor comparison ratio/ proportion unequal sharing/grouping similar shapes

Words that can be confused in meaning within measure/number

Approximation v Estimation

An approximation is applied to a number that already exists: an estimation creates a number by making a judgement.

Capacity v Volume

Capacity is about the space available to hold something and volume is the space occupied by the object or substance. For example a bucket has a capacity of 5 litres so the volume of water needed to fill the bucket is 5 litres.

Mass V Weight

The mass of an object does not change but their weight can as weight. The difference between mass and weight is that mass is the amount of matter in a material while weight is a measure of how the force of gravity acts upon that mass. But weight is caused by gravity, so your weight on the Moon is less than here on Earth, while the mass stays the same. Weighing scales estimate the mass of the object on it.

Common words and Phrases within Problem Solving – QICA and SATs analysis

Approximately, accurately, calculate, check, correct, difference, efficient, equal, equally, equivalent, explain how you know, inverse operation, make an estimate, missing, not to scale, show your workings, to the nearest one decimal point

All of these words are used in a range of contexts however, depending on the type of problem you are asked to solve, the interpretation of the word is different.