

Richard Avenue Primary School
KS 2 AUTUMN Maths Overview

Year Group	Weeks																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
3	Number and Place Value ~ Count on from 0 in multiples (4,8,50,100) ~10 more/less ~ value of digit up to 999 ~ Read/write no. 1000 ~ compare / order to 1000 ~ Represent no. to 1000 in different ways Partition 3 digit numbers in different ways ~ round 2digit no. to nearest 10 Count up/down in tenths ~ read Roman Numerals to 12 ~ Solve related problems		Mental Methods of +/- ~ vocab. Of add/ subtr. ~ Add/ subtr. 9 using compensation ~ add/ subtr. single digits bridging 10 ~ add several no. using bonds to 10 ~ add/ subtr. mental 3 digit no. and units, multiple of 10 / 100 ~ Add/subtr. Using partitioning ~Add near doubles		Written Methods of +/- ~ add/subtract two,2 digit numbers using ext. written method ~ add/subtr. two, 2 digit no. using formal written method. ~ add/subtr. two, 3 digit numbers using ext. written method ~ add/subtr. two, 3 digit no. using formal written method. ~ understand/use associativity ~ Estimate using rounding / inverse to check ~ Solve related problems.		Mental Methods of X / +/- ~ recall x / +/- for 2,3,4,5,8 and 10 x ~ Partition to multiply ~ X/÷ no. to 99 by 10 ~ x multiples of 10 using PV and tables facts ~ Use doubling to connect 2,4,8x tables ~ derive new facts using PV and x/+ ~ understand / use commutativity ~ derive/recall doubles of all multiples of 10 to 100 and corresponding halves ~ double any multiple of 5 to 100		Written Methods of x/+ ~ multiply a 2digit number by single digit no. using an extended written method. ~ multiply a 3digit number by single digit no. using an extended written method. ~ Multiply 2 and 3 digit numbers with products less than 1000 using a formal written method numbers. ~ Solve related problems including missing numbers. Divide a 2 digit no. by known tables facts using extended written method (e.g. no. line / chunking) Divide a 2 digit no. by known tables facts using a formal method ~ solve related problems		Length / Perimeter ~ compare / convert m,cm,mm ~ measure using m,cm,mm ~Record using mixed units ~ Measure in class/school yard. Add/subt. measurements ~ measure perimeter using a ruler ~ Solve related problems		Time ~ tell / write time from analogue clock using Roman Numerals ~ record using 12/24hr. ~ Convert between analogue and 12hr digital ~Know/ convert measures of time (mins, in hour, days in months, year, leap year ~estimate / measure to nearest min. ~Compare / order times (sec., minutes, hours) Compare duration of events ~ Solve related problems					
4	Number and Place Value ~ Recognise the place value of each digit in a 4 digit number. ~ Order/compare numbers/measures beyond 1,000 ~ Find 1000 more/less than a given number ~ Identify, represent, estimate numbers to 10,000 ~ Round no. to 10,100 and 1000 ~ Count backwards through zero (negative numbers) ~ Count in multiples of 6,7,9,25,and 1000 ~ read Roman Numerals to 100 ~ Solve related problems		Mental Methods of +/- ~ vocab. Of add/ subtr. ~ Add/ Subtract 90 / 900 using compensation ~ Add/ subtract multiples of ten bridging 100/ multiples of 100 bridging 1000. ~ Add several no. using number bonds ~ Add/ subtract two, two digit numbers using partitioning ~ Mentally add/ subtract pairs of 3/4 digit numbers ~ use add/subtract facts to 100 to derive related facts to 1,000 ~ Derive/recall sums/ differences of pairs of multiples of 10,100 and 1,000 ~ Derive / recall doubling of no. to 100 and corresponding halves ~ Derive/recall what must be added to any 3 digit no. to make the next multiple of 100 ~ Add near doubles		Written Methods of +/- ~ Add up to 4 digits using an extended written method ~ Add/ Subtract up to 4 digits using a formal written method ~ Use inverse relationship of add and subtract ~ Estimate/use inverse to check answers ~ Solve two step problems in context.		Mental Methods of X / +/- ~ vocab. Of multiplication/division ~Know multiplication/division facts for all tables to 12 x 12 ~ Use place value / known facts to multiply/divide mentally ~ Recognise factor pairs ~ Use factor pairs in mental calculations ~ Recognise/use commutativity in mental calculation ~ Derive/recall all doubles to 10 ~ Derive/recall doubles of multiples of 10 and corresponding halves ~ Double any two digit number Double any multiple of 10/100 and halve the corresponding multiple ~ halve an even number to 200 using known halves and place value		Written Methods of x/+ ~ Multiply a 2d/3d number by 1 digit using the grid method ~ Multiply a 2d/3d number by 1 digit using extended method ~ Multiply a 2d/3d number by 1 digit using compact method ~ check answers using rounding ~ Distributive Law ~ Associative Law ~ Solve problems involving: • Multiply/add • Scaling • Correspondence ~ Divide 2/3 digit number by 1 digit number with exact answers using chunking Divide 2/3 digit number by 1 digit number with exact answers using short division ~ Solve two step problems in context including correspondence questions		Area ~ vocab. Of area ~ find area of rectilinear shapes counting squares ~ relate to arrays and multiplication		Fractions See spring overview					
5	Number and Place Value ~ read/write/order/compare no. to 100,000 know value of each digit ~ count forwards/backwards in steps of powers of 10 from any given number. ~ Round numbers to 10 – 100,000 ~ Multiply / divide whole numbers/decimals by 10, 100, 1000 ~ Understand decimals to 2dp ~ Recognise / describe linear number sequences (integers, decimals, fractions) and identify the rule ~ interpret negative numbers in context ~ count forwards/ backwards across zero ~ Read Roman Numerals to 1000 and recognise years written in Roman Numerals ~ Solve related problems		Mental / Written +/- ~ vocab. Of addition and subtraction ~ Derive/recall what must be added to any 4 digit number to make next multiple of 1000 ~ add / subtract numbers mentally ~ develop knowledge of addition/subtraction facts and derive related facts ~ add/ subtract numbers with more than 4 digits using formal written method. ~ use rounding to check answers (choose appropriate level of accuracy) ~ Solve multi-step problems				Mental / Written x/+ ~ vocab. Of multiplication/division ~ double/halve three digit multiples of 10 ~ Multiply/ divide by 4,8 using doubling/halving ~ multiply by 5 using half of 10x ~ multiply by 20 using double 10x ~ multiply by 50 using half of 100x ~ multiply by 25 using half, half of 100x ~ multiply pairs of multiples of 10, 100 and 1000 ~ multiply / divide mentally drawing upon a variety of strategies ~ know all multiplication/division fact to 12 x 12 ~ identify multiples/factors/factor pairs/common factors ~ know/use prime numbers, prime factors, composite numbers ~ recall all prime numbers to 19 ~ identify all prime numbers to 100 ~ recognise/use square and cubed numbers ~ Multiply a 4 digit number by 1 digit number using short multiplication ~ multiply a 4 digit number by 2 digit number using extended/compact long multiplication ~ Divide a 4 digit number by a 1 digit number using short division ~ Interpret remainders in context ~ Solve multi-step problems involving all four operations				Data ~ Interpret time graphs ~ Solve comparison/sum/difference problems using information presented in line graphs ~ complete information in tables, including timetables ~ read/interpret information in tables, including timetables ~ solve problems ~ decide which representations are most appropriate to represent given data.							
6	Number and Place Value ~ Read/write numbers to 10,000,000, determine value of each digit ~ Order/compare numbers ~ Round to required degree of accuracy ~ Use negative numbers in context ~ Read Roman Numerals to 1000 and recognise years written in Roman Numerals		Mental/Written +/- ~ Vocab. Of +/- ~ derive/recall addition/subtraction facts for multiples of 10 to 1000 ~ Add/ subtract integers over 4 digits using formal written method ~ Solve multi-step problems ~ round answers to a specified degree of accuracy Use estimation to check answers ~ add/subtract positive and negative numbers on a number line in context		Mental/Written x/+ ~ Vocab. Of x/+ ~ use all tables to calculate mathematical statements ~ Divide by 50 (+ 100, x 2) ~ Divide by 25 (+ 100, x 4) ~ Multiply pairs of multiples of 10/100 ~ Multiply large no. by 1 digit no. using short multiplication ~ Multiply up to 4 digit no. by 2 digit number using extended/ formal method ~ round answers to a specified degree of accuracy ~ divide large no. by 1 digit no. using short division, interpret remainders in context ~ Divide numbers by 2 digit number using formal method of long division, express remainder as whole number, fraction or rounding ~ Solve multi step problems ~ Identify common factors, common multiples, primes.		Fractions ~ Vocab. Of fractions ~ Associate a fraction with division ~ use common factors to simplify fractions ~ use common multiples to express fractions using the same denominator ~ understand equivalent fractions including comparison of improper fractions ~ compare and order fractions, proper/greater than one ~ add/subtract fractions/ mixed numbers using a common denominator (multiple of other fraction, lowest common denominator) ~ multiply pairs of proper fractions ~ divide proper fraction by whole number ~ consolidate understanding of relationship between tenths, hundredths, thousandths and decimal notation. ~ calculate decimal fraction equivalents for simple fractions ~ Calculate fraction of whole ~ calculate whole from given fraction ~ solve problems involving scaling by simple fractions and simple rates ~ solve problems involving unequal sharing and grouping using knowledge of fractions/multiples		Time ~ vocab. Of time ~ read times on analogue and digit times ~ record time in a variety of ways ~ use/read/write/ convert between standard units of time ~ Solve problems involving conversion of units of measure.		Decimals See spring overview							