

Upottery Primary School

Mathematics Record for

Topic	Year One	Year Two	Year Three
Counting	Count reliably at least 20 objects	Count to at least 100	
Counting	Count on and back in ones from any small number. Count in tens from and back to zero	Describe and extend simple number sequences; counting on/back in 1s or 10s from any 2-digit number etc odd/even numbers	Count on or back in 10s or 100s from any 2 or 3 digit number
Place value and ordering	Read, write and order numbers from 0 to 20; understand and use the vocabulary of comparing and ordering these numbers	Read, write and order numbers from 0 to 100	Read, write and order numbers from 0 to 1000
Place value and ordering	Within the range 0 to 30, say the number that is 1 or 10 more or less than any given number	Know what each digit represents [including 0] in a two digit number	Know what each digit represents [including 0] in a three digit number
Understanding + and -	Understand the operation of addition and of subtraction [as take away or difference] and use related vocabulary	Understand that subtraction is the inverse of addition; state the subtraction corresponding to a given addition and vice versa	
Rapid recall of facts + and -	Know by heart all pairs of numbers with a total of 10	Know by heart all addition and subtraction facts for each number to at least 10	Know by heart all addition and subtraction facts for each number to 20
Understanding x and -		Understand the operation of multiplication as repeated addition or as describing an array	Understand division and recognise that division is the inverse of multiplication
Understanding x and -		Know and use halving as the inverse of doubling	
Rapid recall of facts x and -		Know by heart the facts from the 2 and 10 multiplication tables	Know by heart the facts from the 2, 5 and 10 multiplication tables
Mental calculation		Use knowledge that addition can be done in any order to do mental calculations more efficiently	Add and subtract mentally a 'near multiple of 10' to or from a 2 digit number
Fractions			Recognise unit fractions such as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$, and use them to find fractions of shapes and numbers
Problems	Use mental strategies to solve simple problems using counting, addition / subtraction, doubling/halving explaining methods and reasoning orally	Choose and use appropriate operations and efficient calculation strategies to solve problems, explaining how the problem was solved	Understand and use £.p notation
Problems			Choose and use appropriate operations [including multiplication and division] to solve word problems, explaining methods and reasoning
Measures	Compare two lengths, masses or capacities by direct comparison	Estimate, measure and compare lengths, masses and capacities, using standard units; suggest suitable units/equipment for such measurements	Use units of time and know the relationships between them [second, minute, hour, day, week, month, year]
Measures	Suggest suitable standard or uniform non-standard units and measuring equipment to estimate, then measure a length, mass or capacity	Read a simple scale to the nearest labelled division, including using a ruler to draw and measure lines to the nearest centimetre	
Shape and space	Use everyday language to describe features of familiar 3-D and 2-D shapes	Use the mathematical names for common 2-D and 3-D shapes; sort shapes and describe some of their features	Identify lines of symmetry in simple shapes and recognise shapes with no lines of symmetry
Shape and space		Use mathematical vocabulary to describe position, direction and movement	Identify right angles

Year Two SATs Level

TA___ Test___

Year Three SATs Level

TA___ Test___

Upottery Primary School

Mathematics Record for

Topic	Year Four	Year Five	Year Six
Place value and ordering	Use symbols correctly, including less than (<), greater than (>), equals =	Multiply and divide any number up to 10,000 by 10 or 100 and understand the effect	Multiply and divide decimals mentally by 10 or 100 and whole numbers by 1000 and explain the effect
Place value and ordering	Round any number less than 1000 to the nearest 10 or 100	Order a given set of positive and negative numbers	
Pencil and paper procedures + and -	Carry out column + and - of 2 numbers less than 1000 and column addition of more than 2 such numbers	Carry out column addition and subtraction of numbers less than 10,000	Carry out column addition and subtraction of numbers involving decimals
Understanding x and -	Find remainders after division		
Rapid recall of number facts x and div	Know by heart facts for the 2, 3, 4, 5 and 10 multiplication tables	Know by heart all multiplication facts up to 10 x 10	
Rapid recall of number facts x and div	Derive quickly division facts corresponding to the 2, 3, 4, 5 and 10 multiplication tables		Derive quickly division facts corresponding to multiplication tables up to 10 x 10
Pencil and paper procedures x and div		Carry out short multiplication and division of a 3 digit by a single digit number	Carry out short multiplication and division of numbers involving decimals
Pencil and paper procedures x and div		Carry out long multiplication of a 2 digit by a 2 digit number	Carry out long multiplication of a three digit by a two digit number
Mental calculations	Use known number facts and place value to add or subtract mentally, including any pair of two digit whole numbers	Calculate mentally a difference such as 8006 - 2993	
Fractions and decimals	Recognise simple fractions that are several parts of a whole and mixed numbers, recognise the equivalence of simple fractions	Use decimal notation for tenths and hundredths	Order a mixed set of numbers with up to three decimal places
Fractions and decimals		Round a number with one or two decimal places to the nearest whole number	Reduce a fraction to its simplest form by cancelling common fractions
Fractions and decimals		Relate fractions to division and to their decimal representations	Use a fraction as an operator to find fractions of numbers or quantities (eg 5/8 of 32, 7/10 of 40, 9/100 of 400 centimetres)
Problems	Choose and use appropriate number operations and ways of calculating (mental, mental with jottings, pencil and paper) to solve problems	Use all four operations to solve simple word problems involving numbers and quantities, including time, explaining methods/reasoning	Identify and use the appropriate operations (including combinations of operations) to solve word problems involving numbers and quantities and explain methods and reasoning
Measures	Know and use the relationships between familiar units of length, mass and capacity	Understand area measured in square cms ; understand and use the formula in words 'length x breadth' for the area of a rectangle	Calculate the perimeter and area of simple compound shapes that can be split into rectangles
Shape and space	Classify polygons, using criteria such as number of right angles, whether or not they are regular, symmetry properties	Recognise parallel and perpendicular lines and properties of rectangles	Use a protractor to measure acute and obtuse angles to the nearest degree
Shape and space			Read and plot co-ordinates in all four quadrants
Percentage, ratio and proportion			Understand percentage as the number of parts in every 100 and find simple percentages of small whole-number quantities
Percentage, ratio and proportion			Solve simple problems involving ratio and proportion
Data			solve a problem by extracting and interpreting information presented in tables, graphs and charts

Year Four SATs Level

TA___ Test___

Year Five SATs Level

TA___ Test___

Year Six SATs Level TA___ Test___