



St. Mark's Maths Medium Term Planning



Year 3 Yearly Overview

Red objectives are essential; these should be prioritised within planning and revisited throughout the year. They are core learning on which next year's curriculum is based. All objectives need to be taught and, where possible, combine objectives so that application is stressed, e.g. fractions of measures.

Number: Number and Place Value								
Counting		Understanding place value		Identifying, representing, estimating		Comparing numbers	Reading & writing numbers	Problem solving
Count from 0 in multiples of 4, 8, 50 and 100 ; find 10 or 100 more or less than a given number		Recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)		Identify, represent and estimate numbers using different representations.		Compare and order numbers up to 1000	Read and write numbers up to 1000 in numerals and in words	Solve number problems and practical problems involving these ideas.
Number: Addition and Subtraction								
Mental Calculation		Written methods		Inverse operations, estimating & checking answers			Problem solving	
Add and subtract numbers mentally, including a 3-digit number and ones; a 3-digit number and tens and a 3-digit number and hundreds		Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction (<i>expanded column addition/subtraction</i>)		Estimate the answer to a calculation and use inverse operations to check answers			Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	
Number: Multiplication and Division								
Mental and Written calculation						Problem solving		
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables		Write and calculate mathematical statements for \times and \div using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods (<i>Grid</i>)				Solve problems, including missing number problems, involving \times and \div, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. (<i>Algebra</i>)		
Number: Fractions								
Counting in fractional steps	Recognising fractions			Comparing fractions	Adding fractions	Equivalence	Problem solving	
Count up & down in tenths	recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10	Recognise, find & write fractions of a discrete set of objects: unit fractions & non-unit fractions with small denominators	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	Compare and order unit fractions, and fractions with the same denominators	Add and subtract fractions with the same denominator within one whole [for example, $5/7 + 1/7 = 6/7$]	Recognise and show, using diagrams, equivalent fractions with small denominators	Solve problems that involve all of the above	
Measurement								
Comparing	Measuring and calculating			Telling the time				
Compare durations of events [E.g. to calculate the time taken by particular events or tasks].	Measure the perimeter of simple 2-D shapes	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Add and subtract amounts of money to give change, using both \pounds and p in practical contexts	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour & 24-hour clocks	Know the number of seconds in a minute and the number of days in each month, year and leap year	Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, noon & midnight		

Geometry: Properties of Shape				Statistics	
Drawing & constructing	Angles			Interpreting, constructing and representing data	
Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	Recognise angles as a property of shape or a description of a turn	Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	Interpret and present data using bar charts, pictograms and tables	Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

Examples of what each objective looks like are available on [NCETM's website](http://www.ncetm.org.uk), (National Centre for the excellence of teaching in maths), www.ncetm.org.uk. Click on: New National Curriculum 2014 blue box – National Curriculum Resource Tool - select appropriate year group and area – click on exemplification.

Suggested Yearly Pacer Year 3

Measurement should be viewed as applied number and calculation. All opportunities to use number in real life contexts should be exploited.
Links between fractions, division and multiplication should be made. Please take all opportunities to draw objectives together rather than teach discretely.
The aims of fluency, reasoning and problem solving should be embedded in all teaching.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 2	Summer 2
Number		Number		Number	
Number and Place Value	Number and Place Value	Number and Place Value	Number and Place Value	Number and Place Value	Number and Place Value
Addition and Subtraction	Addition and Subtraction	Addition and Subtraction	Addition and Subtraction	Addition and Subtraction	Addition and Subtraction
Multiplication and Division	Multiplication and Division	Multiplication and Division	Multiplication and Division	Multiplication and Division	Multiplication and Division
	Fractions		Fractions		Fractions
Measurement		Measurement		Measurement	
Money Time	Length Capacity	Time Volume	Money Mass	Time Length, Mass, Capacity and Volume	Money
Geometry/Statistics		Geometry/Statistics		Geometry/Statistics	
Shape	Statistics	Shape	Statistics		Shape