Year 4 MATHS Subject Map

Number: Place Value Number: Addition and Subtraction Measurement: Length and Perimeter Number: Multiplication and Division	Number: Multiplication and Division Measurement: Area Number: Fractions Number: Decimals Consolidation	Number: Decimals Measurement: Money Measurement: Time Statistics Geometry: Properties of Shape Geometry: Position and Direction Consolidation

AGE RELATED EXPECTATIONS

WORKING TOWARDS ARE

1. Recognise the place value of each digit in a three-digit number (H,T & ones).
2. Count from 0 in multiples of 4,8,50 and 100.
3. Add and subtract numbers mentally, including a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds.
4. Recalls and uses multiplication and division facts for 3,4 and 8 x tables.
5. Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10/100.
6. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
7. Recognise and show, using diagrams, equivalent fractions with small denominator.
8. Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
9. Add and subtract amounts of money to give change, using both £ and p in practical contexts.
10. Tell and write the time from an analogue clock and 12-hour and 24-hour clocks.
11. Identify right angles. 12. Interpret and present data using bar charts, pictograms and tables.

MATHEMATICAL LANGUAGE	ADDITION AND SUBTRACTION	FRACTIONS, DECIMALS AND PERCENTAGES	SHAPE AND GEOMETRY
	22. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 23. Add and subtract numbers with up to 4 digits using the formal column method 24. Estimate and use inverse operations to check answers to a calculation	30. Recognise and show, using diagrams, families of common equivalent fractions. 31.. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. 32. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. 33. Add and subtract fractions with the same denominator 34. Recognise and use factor pairs and communutativity in mental calculations 35. Recognise and write decimal equivalents of any number of tenths or hundredths 36. Recognise and write decimals equivalent to 1/4, 1/2, 3/4 37. 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 ones, tenths and hundredths 38. Round decimals with one decimal place to the nearest whole number. 39. Compare decimals with the same number of decimal places up to 2 decimal places	46. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. 47. Identify lines of symmetry in 2-D shapes presented in different orientations. 48. Plot specified points and draw sides to complete a given polygon. 49. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. 50. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties. 51. Identify acute and obtuse angles and compare and order angles up to two right angles by size. 52. Identify lines of symmetry in 2-D shapes presented in different orientations. 53. Complete a simple symmetric figure with respect to a specific line of symmetry.

PLACE VALUE	MULTIPLICATION AND DIVISION	MEASUREMENT	DIRECTION AND POSITION
13. Count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less than a given number. 14. Find 1000 more or less than a given number 15. Count backwards through zero to include negative numbers. 16. Order and compare numbers beyond 1000. 17. Recognise the place value of each digit in a four-digit number 18. Identify, represent and estimate numbers using different representations 19. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 20. Round any number to the nearest 10, 100 or 1000. 21. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	25. Recall multiplication and division facts for multiplication tables up to 12 × 12. 26. Use place value, known and derived facts to multiply and divide mentally; including multiplying by 0 and 1; dividing by; multiplying together three numbers. 27. Recognise and use factor pairs and communutativity in mental calculations 28. Multiply two digit and three-digit number as by a one-digit number using formal written layout 29. Solve problems involving multiplying and adding, including using the districtive law to multiply two digit numbers by 1 digit.	40. Convert between different units of measure [for example, kilometre to metre; hour to minute]. 41. Measure and calculate the perimeter of a rectilinear figure (including sqaures in centimetres and metres. 42. Find the area of rectilinear shapes by counting squares 43. Estimate, compare and calculate the different measures, including money in pounds and pence. 44. Read, write and convert time between analogue and digital 12 and 24 hour clocks 45. Solve problems involving converting from hour to minutes, minutes to seconds, years to months, weeks to days	54. Describe positions on a 2-D grid as coordinates in the first quadrant. 55. Describe movements between positions as translations of a given unit to the left/right and up/down. 56. Plot specified points and draw sides to complete a given polygon.
			STATISTICS AND DATA HANDLING 57a. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts . 57b. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables .