



Year 4 Mathematics Schema

Year 4		
Autumn Term	Spring Term	Summer Term
Recall multiplication and division facts for multiplication tables up to 12×12		
<u>Number and Place Value</u> *Count in multiples of 6, 9, 25 and 1000. *Find 1000 more or less than a given number. *Count backwards through zero to include negative numbers. *Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). *Order and compare numbers beyond 1000. *Identify, represent and estimate numbers using different representations. *Round any number to the nearest 10, 100 or 1000. *Solve number and practical problems that involve all of the above and with increasingly large positive numbers. *Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. <u>Number - Addition and Subtraction</u> *Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. *Estimate and use inverse operations to check answers to a calculation. *solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	<u>Number and Place Value</u> *Count in multiples of 7 <u>Number - Multiplication and Division</u> *Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. *Use place value, known and derived facts to multiply and divide mentally. * Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. <u>Measurement</u> *Find the area of rectilinear shapes by counting squares. <u>Numbers - Fractions (including decimals)</u> *Recognise and show, using diagrams, families of common equivalent fractions. *Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	<u>Measurement - Money</u> *Solve simple measure and money problems involving fractions and decimals to two decimal places. *Estimate, compare and calculate different measures, including money in pounds and pence. <u>Measurement</u> - Length and Perimeter *Convert between different units of measure [for example, kilometre to metre; hour to minute]. *Estimate, compare and calculate different measures *Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. *Consolidation of problem solving (involving fractions, money and the 4 operations). <u>Geometry- Properties of Shape</u> *compare and classify geometric shapes, including quadrilaterals and



Year 4 Mathematics Schema

Measurement - Perimeter

*Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.

Number - Multiplication and Division

*Use place value, known and derived facts to multiply mentally, including multiplying by 0 and 1.

*Recognise and use factor pairs and commutativity in mental calculations.

**Revise / consolidate efficient mental methods from Year 3 (including associativity and commutativity).*

*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.

*Add and subtract fractions with the same denominator.

*Recognise and write decimal equivalents of any number of tenths or hundredths.

*Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$

*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.

*Round decimals with one decimal place to the nearest whole number.

*Compare numbers with the same number of decimal places up to two decimal places.

triangles, based on their properties and sizes

*identify acute and obtuse angles and compare and order angles up to 2 right angles by size

*identify lines of symmetry in 2-D shapes presented in different orientations

*complete a simple symmetric figure with respect to a specific line of symmetry

Geometry- Position and Direction

*describe positions on a 2-D grid as coordinates in the first quadrant

*describe movements between positions as translations of a given unit to the left/right and up/down*plot specified points and draw sides to complete a given polygon

Measurement - Time

*Read, write and convert time between analogue and digital 12- and 24-hour clocks.

*Solve problems involving converting from hours to minutes; minutes to



Year 4 Mathematics Schema

		seconds; years to months; weeks to days. <u>Statistics</u> *interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs *solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
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