Year 5 Medium Term Plan - Maths

Autumn Term						
Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions	Properties of Shape / Position and Direction	Measurement	Statistics
2 week block	2 week block	2 week block	2 week block	2 week block	2 week block	2 week block

Spring Term						
Number – Number and Place Value	Number- Addition and Subtraction	Number – Multiplication and Division	Number - Fractions	Properties of Shape / Position and Direction	Measurement	Statistics
2 week block	2 week block	2 week block	2 week block	2 week block	2 week block	2 week block

Summer Term						
Number – Number and Place Value	Number- Addition and Subtraction	Number – Multiplication and Division	Number - Fractions	Properties of Shape / Position and Direction	Measurement	Statistics
2 week block	2 week block	2 week block	2 week block	2 week block	2 week block	2 week block

Number – Number and Place Value	Number- Addition and Subtraction	Number – Multiplication and Division	Number - Fractions	Properties of Shape / Position and Direction	Measurement	Statistics
Objectives	Objectives	Objectives	Objectives	Objectives	Objectives	Objectives
Read, write, order and compare numbers up to at least 1,000,000 and determine the value of each digit e.g. what is the value of the '7' in 276,541? Find the difference between the largest and smallest whole numbers that can be made from using three digits. ***I can read, write, order and compare numbers up to at least 1,000,000 (one million) and say the value of each digit.*** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.	**Add and subtract whole numbers with more than 4 digits, using formal written methods (columnar addition and subtraction).** ***I can add and subtract numbers with more than 4 digits using written methods.*** **Add and subtract numbers mentally with increasingly large numbers.** ***I can add and subtract 2 and 3 digit numbers in my head.***	**Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.** ***I can find multiples and factors of a number and can identify factors common to 2 different numbers.*** Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. *I can use vocabulary relating to prime numbers, prime factors and composite numbers.* Establish whether a number up to	**Compare and order fractions whose denominators are multiples of the same number.** ***I can compare and order fractions whose denominators are all multiples of the same number.*** Identify and name equivalent fractions of a given fraction, represented visually, including tenths and hundredths. *I can find and name equivalent fractions of a given fraction including tenths and hundredths.* Write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. *I can write equivalent fractions of a given fraction including tenths and hundredths.*	2-D representations. *I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations.* Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. *I can estimate and compare acute, obtuse and reflex angles.* *I know that angles are measured in degrees.* **Draw given angles and measure them in degrees (°).** ***I can draw given angles and measure them in degrees.***	**Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).** ***I can convert between different forms of metric measurement e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre.*** Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Solve comparison, sum and difference problems using information presented in a line graph. *I can solve comparison, sum and difference problems using information presented in a line graph.* **Complete, read and interpret information in tables, including timetables.** ***I can complete, read and interpret information in tables, including timetables.***

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I can keep multiplying a number by 10 or 100 up to 1,000,000 and count back. **Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.** ***I can use negative numbers in context when looking at temperature or money, counting forwards and backwards through 0.*** Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000. *I can round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000.* Solve number problems and practical problems that involve ordering and comparing numbers up to 1,000,000, counting forwards or backwards in steps, interpreting negative numbers and rounding. *I can solve number and practical problems that involve ordering and comparing numbers up to 1,000,000, counting forwards or backwards in steps, negative numbers, and rounding.* Read Roman numerals up to 1000 (M) and recognise years written in Roman numerals. *I can read Roman numerals up to 1000 and recognise years written in them.*	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. *I can use rounding to check answers to calculations and determine levels of accuracy.* **Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.** ***I can solve addition and subtraction problems needing more than one step and can work out which operation and method is the most suitable.***	100 is prime and recall prime numbers up to 19. *I can work out if any given number up to 100 is a prime number and can recall prime numbers up to 19.* Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers. *I can multiply numbers with up to 4 digits by a 1 or 2 digit number using formal written methods.* Multiply and divide numbers mentally, drawing upon known facts. *I can mentally multiply and divide numbers using the times tables.* Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. *I can divide numbers with up to 4 digits by a 1 digit number, using formal written methods, and can show remainders.*	Recognise mixed numbers and improper fractions and convert from one form to the other, and write mathematical statements > 1 as a mixed number e.g. 2/5 + 4/5 = 6/5 = 1 and 1/5. *I can identify mixed numbers and improper fractions and convert from one to another such as 2/5 + 4/5 = 6/5 = 1 and 1/5.* Add and subtract fractions with the same denominator and denominators that are multiples of the same number. *I can add and subtract fractions whose denominators are all multiples of the same number.* Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. *I can multiply fractions by whole numbers using objects and pictures.* **Read and write decimal numbers as fractions e.g. 0.71 = 71/100, 8.09 = 8 + 9/?** ***I can read and write decimal numbers as fractions such as 0.71 = 71/100.*** Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. *I can identify and use thousandths and can explain how they relate to tenths and hundredths and their decimal equivalents.* Round decimals with two decimal places to the nearest whole number and to one decimal place. *I can round numbers with two decimal places.* **Read, write, order and compare numbers with up to three decimal places.** ***I can read, write, order and compare numbers with up to three decimal places.*** Solve problems involving numbers with up to three decimal places. *I can solve problems involving numbers with up to three decimal places.* **Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.** ***I can solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.*** Recognise the percent symbol (%), understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. *I can identify the percent symbol (%) and how it relates to parts per hundred, hundredths and decimals.*	Identify angles at a point and one whole turn (total 360°). *I can identify angles at a point and one whole turn.* Identify angles at a point on a straight line and 1/2 a turn (total 180°). *I can identify angles at a point on a straight line and 1/2 a turn (total 180°).* Identify other multiples of 90°. *I can identify other multiples of 90°.* Use the properties of rectangles to deduce related facts and find missing lengths and angles. *I can use the properties of rectangles to find related facts, missing lengths and missing angles.* **Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.** ***I can tell the difference between regular and irregular polygons. I can do this using reasoning about equal sides and angles.*** Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. *I can identify, describe and represent the position of a shape following a reflection or translation. I can use mathematical vocabulary to explain this and I know that the shape has not changed.*	*I can understand and compare equivalences between metric units and common imperial units. These might include: inches, pounds or pints.* **Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.** ***I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.*** **Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes.** ***I can calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²), square metres (m²), and estimate the area of irregular shapes.*** Estimate volume e.g. using 1cm³ blocks to build cuboids (including cubes) and capacity e.g. using water. *I can estimate volume by using 1cm³ blocks to build cuboids (including cubes) and capacity by using water and different containers.* Solve problems involving converting between units of time. *I can solve problems where I need to convert between units of time.* Use all four operations to solve problems involving measure e.g. length, mass, volume, money, using decimal notation, including scaling. *I can use all four operations to solve problems involving measure such as length, mass, volume, money, using decimal notation, including scaling.*	