Year 5 Maths

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5 Maths	**Place value and addition and subtraction** Pupils will: Read, write, order and compare numbers to at least 100000. Count forwards and backwards with positive and negative whole numbers including through zero. Round numbers and solve number problems and practical problems that involve all of the above. Read Roman numerals to 1000 (M). Add and subtract whole numbers mentally and those with more than 4 digits, using formal written methods (column addition and subtraction).	**Multiplication and division and Statistics** Pupils will: Multiply and divide numbers mentally drawing upon known facts. Multiply and divide whole numbers by 10, 100 and 1000. Multiply and divide numbers up to 4 digits by a one or two digit number using a formal written method. Identify multiples and factors. Recognise and use square numbers and cube numbers and the notation for squared (^{2}) and cubed (^{3}) Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign. Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables including timetables.	**Fractions** Pupils will: Compare and order fractions whose denominators are multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers. Read and write decimal numbers as fractions [for example 0.71 = $^{71}/_{100}$] Solve problems involving multiplication and division.	**Decimals and percentages** Pupils will: Read, write, order and compare numbers with up to 3dp. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals and solve problems involving number with up to 3dp. Multiply and divide numbers with up to 3dp decimals by 10, 100 and 1000. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] Recognise the per cent symbol (%) Solve problems which require knowing percentage and decimal equivalents of ½, ¼, ⅕, ⅖, ⅘ and those fractions with a denominator of a multiple of 10 or 25.	**Angles, shapes and position and direction** Pupils will: Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees (^{o}) Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90° Identify 3D shapes, including cubes and other cuboids, from 2D representations. Use the properties of rectangles to find missing lengths and angles. Identify, describe and represent the position of a shape following a reflection or translation.	**Converting measures, prime numbers, perimeter, area and volume** Pupils will: Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml) Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Solve problems involving converting between units of time. Establish whether a number up to 100 is prime and recall prime numbers up to 19. Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles (including squares), and including using standard units, cm^2,m^2 Use all four operations to solve problems involving measure.