Federation of Yatton Schools : Year 6 Medium Term Planning Autumn 1

Date	Area of Study	Curriculum Objective	Non-Statutory Guidance	What will core learning look like?
	Number: Place Value and rounding	● To read, write, order and compare numbers at least to 10,000,000 and determine the value of each digit. ● To round any whole number to a required degree of accuracy. ● To solve number problems and practical problems that involve all of the above.	Pupils use the whole number system, including saying, reading and writing numbers accurately.	
	Addition and subtraction – Mental strategies	● To perform mental calculations, including with mixed operations and large numbers. ● To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Pupils practise addition, subtraction, multiplication and division for larger numbers, using the formal written methods of columnar addition and subtraction, short and long multiplication, and short and long division (see Mathematics Appendix 1). They undertake mental calculations with increasingly large numbers and more complex calculations. Pupils continue to use all the multiplication tables to calculate mathematical statements in order to maintain their fluency. Pupils round answers to a specified degree of accuracy, for example, to the nearest 10, 20, 50 etc., but not to a specified number of significant figures. Pupils explore the order of operations using brackets; for example, 2 + 1 x 3 = 5 and (2 + 1) x 3 = 9. Common factors can be related to finding equivalent fractions.	
	Multiplication and division : Factors and prime numbers	● To perform mental calculations, including with mixed operations and large numbers. ● To identify common factors, common multiples and prime numbers. ● To solve problems involving addition, subtraction, multiplication and division.		
	Written methods for multiplication and division: HTU × TU and HTU × U	● To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. ● To divide numbers up to 4 digits by a two-digit whole number using the efficient written method of long division, and interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context. ● To solve problems involving addition, subtraction, multiplication and division. ● To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.		

	Geometry: Circles and angles	● To illustrate and name parts of circles, including radius, diameter and circumference. ● To recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	Pupils draw shapes and nets accurately, using measuring tools and conventional markings and labels for lines and angles. Pupils describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements. These relationships might be expressed algebraically for example, $d = 2 \times r$; $a = 180 - (b + c)$.	
	Units of Measure	● To solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate. ● To use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa using decimal notation to three decimal places. ● To convert between miles and kilometres.	Pupils connect conversion (for example, from kilometres to miles) to a graphical representation as preparation for understanding linear/proportional graphs. They know approximate conversions and are able to tell if an answer is sensible. Using the number line, pupils use, add and subtract positive and negative integers for measures such as temperature. They relate the area of rectangles to parallelograms and triangles, for example, by dissection, and calculate their areas, understanding and using the formulae (in words or symbols) to do this. Pupils could be introduced to compound units for speed, such as miles per hour, and apply their knowledge in science or other subjects as appropriate.	
To assess the half-term's work				