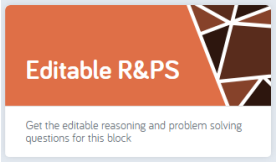
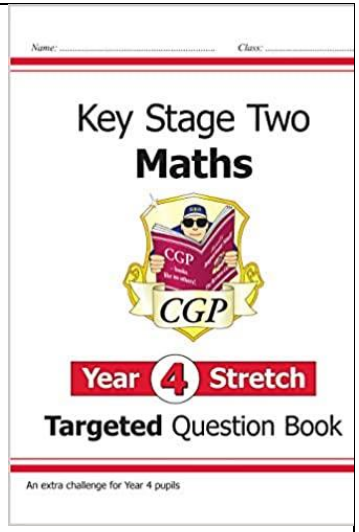
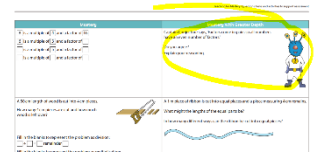
Essentials Planning		DfE core guidance	NCETM PD spine materials	Challenge
4LS1 **4LS2**	**Place Value – Order and Compare Numbers Beyond 1000 Rounding, Estimation and Magnitude**	**4NPV–1** Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. **4NPV–2** Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning. **4NPV–3** Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each. **4NPV–4** Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.	Revision of year 3 place value and building on this to 10,000 https://www.ncetm.org.uk/classroom-resources/cp-year-4-unit-2-numbers-to-10-000/ 1.22 Composition and calculation: 1,000 and four-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-22-composition-and-calculation-1-000-and-four-digit-numbers/	**Option 1:** Click on relevant White Rose link in previous column e.g. https://resources.whiterosemaths.com/resources/year-4/autumn-block-1-place-value/ and click on editable reasoning and problem solving:  **Option 2:** Recommended books:
4LS3	**Securing Addition and Subtraction Mental Fluency** REKENREKS- See Laura			
4LS4	**Securing Formal Written Addition and Subtraction Fluency**		Review of column addition and subtraction (yr 3-4) https://www.ncetm.org.uk/classroom-resources/cp-year-4-unit-1-review-of-column-addition-and-subtraction/	
4LS5	**Counting in Multiples of 6, 7, 9, Drip feed as part of daily times table practice including 3x 25 & 1000**	**4NF–1** Recall multiplication and division facts up to 12×12, and recognise products in multiplication tables as multiples of the corresponding number.	2.8 Times tables: 3, 6 and 9, and the relationship between them. https://www.ncetm.org.uk/classroom-resources/primm-2-08-times-tables-3-6-and-9-and-the-relationship-between-them/	
4LS6	**Multiplication and Division Facts (Times Tables) Drip feed as part of daily times table practice**			

			2.9 Times tables: 7 and patterns within/across times tables https://www.ncetm.org.uk/classroom-resources/primm-2-09-times-tables-7-and-patterns-within-across-times-tables/ 2.11 Times tables: 11 and 12 https://www.ncetm.org.uk/classroom-resources/primm-2-11-times-tables-11-and-12/	 **Option 3:** NCETM primary assessment materials for Year 4 which have a master with greater depth column https://www.ncetm.org.uk/media/x45na0cs/mastery_assessment_y4.pdf  **Option 4:** NRICH– use the National Curriculum tracking
4LS24	**Multiply Two and Three-digit Numbers by a One-digit Number Using a Formal Written Layout**			
4LS25	**Divide Two and Three-digit Numbers by a One-digit Number Using a Formal Written Layout**	**4NF–2** Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, for example: $74 \div 9 = 8$ r 2 and interpret remainders appropriately according to the context.	2.12 Division with remainders https://www.ncetm.org.uk/classroom-resources/primm-2-12-division-with-remainders/	
4LS8	**Problem Solving Including Measures to Apply Place Value, Mental Strategies and Arithmetic Laws**	**4NF–3** Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100), for example: $8 + 6 = 14$ and $14 - 6 = 8$ so $800 + 600 = 1{,}400$ $1{,}400 - 600 = 800$ $3 \times 4 = 12$ and $12 \div 4 = 3$ so $300 \times 4 = 1{,}200$ $1{,}200 \div 4 = 300$	1.22 Composition and calculation: 1,000 and four-digit numbers https://www.ncetm.org.uk/classroom-resources/primm-1-22-composition-and-calculation-1-000-and-four-digit-numbers/	
3LS18	**Associative and Distributive law taught in year 3 –**	**4MD–2** Manipulate multiplication and division equations, and	2.10 Connecting multiplication and division, and the distributive law https://www.ncetm.org.uk/classroom-	

	Multiplication – Strategy, Associative and Distributive Laws	understand and apply the commutative property of multiplication.	resources/primm-2-10-connecting-multiplication-and-division-and-the-distributive-law/	document to locate relevant material https://docs.google.com/spreadsheets/d/1j6RPbZA1i0tdJDZtwBjiNtwJQE-1NcmtHYgQJdJrvDM/edit#gid=694489868
4LS9		**4MD–1** Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.	2.13 Calculation: multiplying and dividing by 10 or 100 https://www.ncetm.org.uk/classroom-resources/primm-2-13-calculation-multiplying-and-dividing-by-10-or-100/	
4LS10	**Measure – Conversion of Units**	**Not explicitly covered as a separate unit until year 5**		
4LS11	**Measures – Compare, Estimate and Calculate**	**5NPV–5** Convert between units of measure, including using common decimals and fractions.		
4LS12	**Discrete and Continuous Data (Time Graphs), Including Application of Scales and Division**			
4LS13	**Perimeter**			
4LS14	**Properties of Shape Moved to start of Term 3**			
4LS15	**Symmetry Moved to start of Term 3**			
4LS16	**Decimal Numbers**	Not covered in DfE guidance until Year 5		
4LS17	**Calculating With Decimals**			
4LS18	**Measure – Money**			
4LS19	**Problem Solving involving Decimals to Two Decimal Places drip problem solving into 4LS16-18**			
4LS20	**Add and Subtract Fractions with the Same Denominator**	**4F–1** Reason about the location of mixed numbers in the linear number system.	3.5 Working across one whole: improper fractions and mixed numbers https://www.ncetm.org.uk/classroom-resources/primm-3-05-working-across-one-whole-improper-fractions-and-mixed-numbers/	
4LS21	**Finding Fractions of Quantities**	**4F–2** Convert mixed numbers to improper fractions and vice versa.	3.5 Working across one whole: improper fractions and mixed numbers https://www.ncetm.org.uk/classroom-resources/primm-3-05-working-across-one-whole-improper-fractions-and-mixed-numbers/	
4LS22	**Fractions in the Context of Measure**			
4LS23	**Equivalent Fractions, Ordering and Comparing**	**4F–3** Add and subtract improper and mixed fractions with the same	3.5 Working across one whole: improper fractions and mixed numbers https://www.ncetm.org.uk/classroom-	

		denominator, including bridging whole numbers, for example: $\frac{7}{5}+\frac{4}{5}=\frac{11}{5}$ $3\frac{7}{8}-\frac{2}{8}=3\frac{5}{8}$ $7\frac{2}{5}+\frac{4}{5}=8\frac{1}{5}$ $8\frac{1}{5}-\frac{4}{5}=7\frac{2}{5}$	resources/primm-3-05-working-across-one-whole-improper-fractions-and-mixed-numbers/
4LS26	**Time – Read, Write Calculate and Convert Time on Analogue and Digital 12- and 24-Hour Clocks drip into maths meetings if short for time**		
4LS27	**Statistics – Interpret and Present Continuous and Discrete Data, Solve Problems incorporating Measures consider what can be covered in science if short for time**		
4LS28	**Roman Numerals to 100 and Zero**		
4LS29	**Negative Numbers – Counting through Zero and Calculating in Context**		
4LS30	**Geometry – Angles**	**4G–2** Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.	2.16 Multiplicative contexts: area and perimeter 1 https://www.ncetm.org.uk/classroom-resources/primm-2-16-multiplicative-contexts-area-and-perimeter-1/
		4G–3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with	

		respect to a specified line of symmetry.	
4LS31	**Geometry – Properties of Triangles**		
4LS32	**Geometry – Coordinates in the First Quadrant and Translations**	**4G–1** Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.	
4LS33	**Geometry – Position and Direction, incorporating Angles and Plotting Points of a Shape**		
4LS34	**Multiplication and Division Review Leave out if run out of time**		
4LS35	**Area**		
4LS36	**Fractions Review Leave out if run out of time**		
4LS37	**Application and Problem Solving – Developing Operation Sense Leave out and focus on laying ground for place value in year 5 – up to 1 million.**		