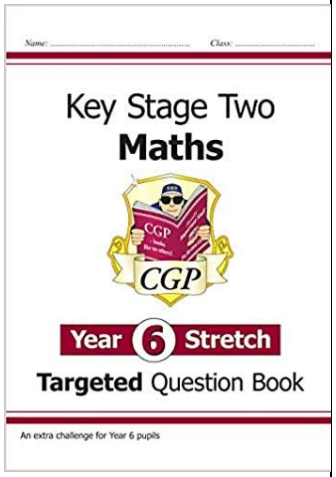
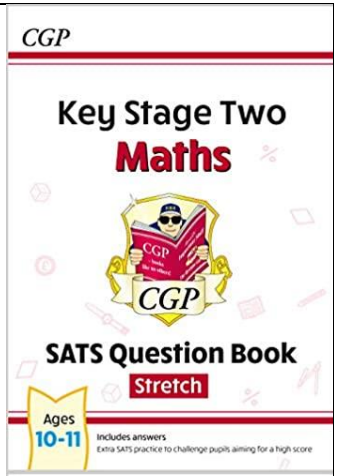
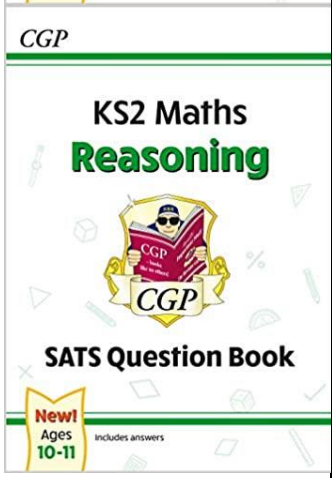
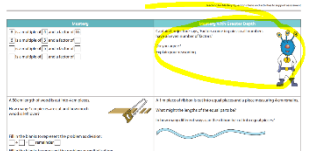
Essentials Planning		DfE core guidance	NCETM PD spine materials	Challenge
6LS1	**Place Value**	**6NPV–1** Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). **6NPV–2** Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning. **6NPV–3** Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts. **6NPV–4** Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.	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/ 1.23 Composition and calculation: tenths https://www.ncetm.org.uk/classroom-resources/primm-1-23-composition-and-calculation-tenths/ 1.24 Composition and calculation: hundredths and thousandths https://www.ncetm.org.uk/classroom-resources/primm-1-24-composition-and-calculation-hundredths-and-thousandths/ 1.30 Composition and calculation: numbers up to 10,000,000 https://www.ncetm.org.uk/classroom-resources/primm-1-30-composition-and-calculation-numbers-up-to-10-000-000/	**Option 1:** Click on relevant White Rose link in previous column e.g. https://resources.whiterosemaths.com/resources/year-6/autumn-block-1-place-value/ and click on editable reasoning and problem solving:  **Option 2:** Recommended books: 
6LS2	**Multiply and Divide by 10, 100 and 1,000**			
6LS3 **6LS4** **6LS31**	**Choosing Effective Mental Calculation Strategies** **Problem Solving with Four Operations** **Application of Known Facts and Calculation Strategies**	**6AS/MD–1** Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). **6AS/MD–1** Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.	1.29 Using equivalence and the compensation property to calculate https://www.ncetm.org.uk/classroom-resources/primm-1-29-using-equivalence-and-the-compensation-property-to-calculate/	

			2.25 Using compensation to calculate https://www.ncetm.org.uk/classroom-resources/primm-2-25-using-compensation-to-calculate/	  **Option 3:** NCETM primary assessment
6LS5	**Application of Factors, Multiples and Primes**			
6LS6	**Equivalent Fractions**	**6F–1** Recognise when fractions can be simplified, and use common factors to simplify fractions.	3.7 Finding equivalent fractions and simplifying fractions https://www.ncetm.org.uk/classroom-resources/primm-3-07-finding-equivalent-fractions-and-simplifying-fractions/ Upper Key Stage 2 fractions video lessons, lessons 10 - 17 https://www.ncetm.org.uk/classroom-resources/vl-upper-key-stage-2-fractions-video-lessons/	
6LS7 **6LS8**	**Comparing and Ordering Fractions** **Adding and Subtracting Fractions**	**6F–2** Express fractions in a common denomination and use this to compare fractions that are similar in value. **6F–3** Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.	3.8 Common denomination: more adding and subtracting https://www.ncetm.org.uk/classroom-resources/primm-3-08-common-denomination-more-adding-and-subtracting/	
6LS21	**Multiplying Fractions**			
6LS22	**Dividing Fractions**			
6LS23	**Fraction Problem Solving**			

				materials for Year 5 which have a master with greater depth column https://www.ncetm.org.uk/classroom-resources/assessment-materials-primary/  **Option 4:** NRICH– use the National Curriculum tracking document to locate relevant material https://docs.google.com/spreadsheets/d/1j6RPbZA1i0tdJDZtwBjiNtwJQE-1NcmtHYgQJdJrvDM/edit#gid=694489868
6LS11	Calculating Percentages			
6LS12	Formal Written Method of Multiplication			
6LS13	Area of Parallelograms and Triangles			
6LS18	Exploring Relationships Between Perimeter and Area	**6G–1** Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	2.16 Multiplicative contexts: area and perimeter 1 https://www.ncetm.org.uk/classroom-resources/primm-2-16-multiplicative-contexts-area-and-perimeter-1/	

6LS14	Formal Written Method of Short Division			
6LS15	Properties of Shape			
6LS25	Volume			
6LS16	Order of Operations and Algebra			
6LS28	Algebra and Sequences	**6AS/MD–4** Solve problems with 2 unknowns.	1.31 Problems with two unknowns https://www.ncetm.org.uk/classroom-resources/primm-1-31-problems-with-two-unknowns/	
6LS34	Further Algebra			
6LS17	Formal Written Method for Long Division			
6LS19	Recognise and Find Angles			
6LS20	Reflection and Translation			
6LS24	Ratio and Proportion	**6AS/MD–3** Solve problems involving ratio relationships.	2.27 Scale factors, ratio and proportional reasoning https://www.ncetm.org.uk/classroom-resources/primm-2-27-scale-factors-ratio-and-proportional-reasoning/	
6LS26	Measures			
6LS27	Statistics – Interpret Line Graphs and Pie Charts			
6LS29	Statistics – Calculate and			
6LS33	Statistical Representations			
6LS30	Interpret Mean Average			
6LS32	Constructing Pie Charts			