Autumn 1		Autumn 2		
Week 1-6	**Week 7**	**Week 8-9**	**Week 10-13**	**Week 14**
Calculating using knowledge of structures **https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-1-calculating-using-knowledge-of-structures/**	**Order of operations** **https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-12-order-of-operations/**	**Multiples of 1000** **https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-2-multiples-of-1-000/**	**Numbers up to 10,000,000** **https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-3-numbers-up-to-10-000-000/**	**SATS baseline testing**
• Understand and represent how different parts can make the same whole using expressions and models. • Identify and use part-whole structures in problems and stories. • Create and interpret stories that match part-whole models. • Represent equations using part-whole models. • Identify and calculate missing parts using part-whole knowledge. • Use known facts to solve addition and subtraction problems mentally. • Solve calculations with missing addends or subtrahends. • Use additive structures to solve problems efficiently. • Explain how adjusting addends affects the sum (including with decimals). • Use the 'same sum' rule to balance and solve equations. • Explain how adjusting the minuend or subtrahend affects the difference. • Use the 'same difference' rule to simplify mental and written subtraction. • Balance equations using the 'same difference' rule.	• Use addition and subtraction to solve multiplication problems efficiently. • Use addition and subtraction to solve division problems efficiently. • Understand how the distributive law applies to multiplication with a common factor (using addition). • Understand how the distributive law applies to division with a common divisor (using addition and subtraction). • Use the distributive law to solve equations involving multiplication, division, addition, and subtraction.	• Understand how 10,000 and 100,000 can be composed from smaller parts. • Read and write numbers up to 1,000,000 confidently. • Count forwards and backwards in powers of 10 from multiples of 1,000. • Identify and place five- and six-digit multiples of 1,000 on marked number lines. • Use knowledge of how 10,000 and 100,000 are composed to read scales in graphs and measurement contexts.	• Understand and compose numbers up to tens of millions using common intervals. • Recognise and create numbers with place-holding zeroes. • Determine the value of digits in numbers up to eight digits. • Read, write, and compare numbers up to eight digits efficiently. • Identify and estimate the position of large numbers on marked and unmarked number lines. • Recognise patterns in counting sequences • Round numbers up to seven digits to the nearest million, hundred thousand, or other powers of 10. • Explain why rounding is useful in different contexts. • Add and subtract numbers up to seven digits using mental and written methods. • Solve problems that cross the millions boundary. • Choose and explain the most efficient strategy (mental or written) for solving problems. • Use column methods and explore alternative strategies for addition and subtraction.	

Spring 1		Spring 2	
Week 1-3	**Week 4-7**	**Week 8-9**	**Weeks 10-11**
Multiplication and division https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-5-multiplication-and-division/	**Fractions and percentages** https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-7-fractions-and-percentages/	**Area, perimeter, position and direction** https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-6-area-perimeter-position-and-direction/	**Draw, compose and decompose shapes** https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-4-draw-compose-and-decompose-shapes/

• Understand how changing one factor (e.g. doubling one and halving the other) affects the product.
• Explain how scaling both factors or both parts of a division affects the result.
• Use knowledge of equivalence and multiplicative change to solve problems efficiently.
• Multiply up to four-digit numbers by two-digit numbers using long multiplication (with and without regrouping).
• Use the associative law and factorising to multiply efficiently.
• Choose between long multiplication and other strategies based on efficiency.
• Use short and long division accurately, including with remainders, decimals, and fractions.
• Divide two-, three-, and four-digit numbers by two-digit numbers.
• Use ratio charts to support division strategies.
• Interpret and represent remainders in different contexts.
• Solve multiplication and division problems in real-life contexts.
• Identify the most efficient method for solving a calculation.
 	
• Explain how and why products and quotients change when factors, dividends, or divisors change.
	• Simplify fractions and apply this when solving problems.
	• Add and subtract related fractions (unit and non-unit), with and without visual models.
	• Add and subtract non-related fractions with different denominators.
	• Use fraction sense to compare, add, and subtract fractions.
	• Solve problems involving fraction addition and subtraction in real-life contexts.
	• Compare non-related fractions using:
	  • Common denominators
	  • Common numerators
	  • Fraction sense
	• Choose the most efficient method for comparing fractions.
	• Multiply unit and non-unit fractions.
	• Divide unit and non-unit fractions by whole numbers.
	• Know when and how to divide fractions efficiently.
	• Understand what percentages mean and how to represent them.
	• Convert between fractions, decimals, and percentages.
	• Solve problems involving percentage conversions.
	• Calculate 50%, 10%, 1%, and other common percentages of a number.
	• Calculate any percentage of a number.
	
	Solve problems where the percentage and part are known, and the whole is unknown or changes.
		• Calculate the area of parallelograms and triangles.
		• Understand that shapes can have the same area but different perimeters, and vice versa.
		• Describe how scale factors affect side lengths and perimeters of shapes.
		• Describe positions on a full coordinate grid (all four quadrants).
		• Draw, translate, and reflect shapes on the coordinate plane.
			• Identify, draw, and describe 2D and 3D shapes using their properties.
			• Understand that different nets can form the same 3D shape.
			• Recognise how shapes can be composed and decomposed (e.g. triangles forming parallelograms).
			• Understand that decomposing and rearranging shapes does not change their area.
			• Calculate the area of compound shapes by adding the areas of their parts.
			• Compare shapes with the same area but different perimeters, and vice versa.
			
			Use relationships between side length, area, and perimeter to reason about measurements.

Summer 1			Summer 2		
Week 1-2	**Week 3-4**		**Week 7**	**Week 8-9**	**Week 10-13**
Statistics https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-8-statistics/ Mean as an average https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-13-mean-average/	Ratio and proportion https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-9-ratio-and-proportion/		Calculation and knowledge of structures https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-10-calculating-using-knowledge-of-structures/	Solving problems with two unknowns https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-11-solving-problems-with-two-unknowns/	
Statistics: • interpret and construct pie charts and line graphs and use these to solve problems **Mean as an average:** • Understand the mean as a way of sharing data equally. • Calculate the mean of a data set, including when values are missing or zero. • Explore how changes in the total or number of values affect the mean. • Use the mean to compare different sets of data. • Recognise when the mean is not a suitable measure to represent data.	• Describe and use the relationship between two or more values in ratio problems. • Use multiplication and division to find unknown values in ratio problems (with two or three variables). • Use ratio grids to solve problems efficiently. • Solve correspondence problems using multiplication. • Understand and apply scaling in real-life contexts, such as maps. • Use multiplication and division to solve scaling problems. • Identify and describe the relationship between shapes using scale factors and ratios (including squares, regular and irregular polygons).	**SATs week**	• Balance equations using addition and subtraction. • Solve problems by applying knowledge of balanced equations.	• Compare and represent problems with one or two unknowns using bar models and diagrams. • Understand when problems have one, several, or infinite solutions. • Use part-whole models to explore possible values. • Solve problems with two unknowns using bar models, diagrams, and trial and improvement. • Explain how to balance equations with two unknowns. • Know how to find all possible solutions systematically.	***Year 7 transition maths project***