Year 6 summer home learning overview 2020-21

Quality First Education Trust

Summer term 1 2020-21					
1 Recap and review week					
INSET day	Recap decimals and recap measures	Recap 4 operations word problems:	Recap percentage	Recap ratio	Recap algebra
	Learn the strategy: **Complete the review of Chapter 4 (Decimals) and Chapter 5 (Measures):** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 6 (Word problems):** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 7 (Percentages):** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 8 (Ratio):** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 9 (Algebra):** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.
2 Recap and review				**Chapter 13: Position and Movement**	
Recap area and perimeter (Year 5, Ch 12)	Recap area and perimeter (Year 6. Ch 10)	Recap volume: (Year 5, Ch 13 & Year 6, Ch 11)	Recap geometry	Recap: Lesson 1: Showing Negative Numbers & Lesson 2: Describing Position	Lesson 3: Describing Position To describe the position of points using coordinates on a grid.
Learn the strategy: **Complete the review of Chapter 12 (Bk 5B): Area and Perimeter** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 10 (Bk 6B), Area and perimeter:** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 13 (Bk 5B) and Chapter 11 (Bk 6B): Volume** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** **Complete the review of Chapter 12 (Geometry):** Use the strategies we have learnt in this chapter. Go back to watch the videos if you are not sure.	**Learn the strategy:** https://classroom.thenational.academy/lessons/negative-numbers-in-context-68t66c	**Learn the strategy:** https://vimeo.com/429428268/e97257c390
3 Chapter 13: Position and Movement					
May bank holiday	Lesson 4: Drawing Polygons on a Coordinate Grid To draw polygons on a coordinate grid; to recognise polygons on a coordinate grid.	Lesson 5: Describing Translations To describe the translation of shapes on a coordinate grid.	Lesson 6: Describing Reflections To describe reflection using a mirror line and the terms 'object' and 'image'.	Lesson 7: Describing Movements To describe the movement of objects using the terms 'translation' and 'reflection'.	*Lesson 8: Describing Movements To describe the movement of objects using the terms 'translation' and 'reflection'.*
	Learn the strategy: https://classroom.thenational.academy/lessons/describing-coordinate-positions-on-a-grid-6hgpat?step=1&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/translating-simple-shapes-6hjpat?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/reflecting-simple-shapes-6mu3ec?step=2&activity=video	**Learn the strategy:** https://vimeo.com/429433263/f714294bed	

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4			Recap graphs year 4 and 5		
Recap problem solving with addition and subtraction with decimal numbers	**Recap dividing with remainders in different contexts (part 1)**	**Recap dividing with remainders in different contexts (part 2)**	**Recap reading tables, pictograms and bar charts:** Bk 4A, Chapter 5, Graphs, **Lesson 1:** Drawing & reading Picture graphs & Bar graphs	**Recap year 5 graphs, Chapter 5, Lesson 4: Reading Line Graphs** To read and interpret information provided in a line graph where a single line represents the data.	**Lesson 1: Understanding Averages** To calculate the average (mean) of sets of values.
Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/applying-addition-and-subtraction-74tp2d	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/represent-remainders-in-different-ways-depending-on-the-context-of-the-problem-part-1-chj3et	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/represent-remainders-in-different-ways-depending-on-the-context-of-the-problem-part-2-ccu32d	Learn the strategy: https://classroom.thenational.academy/lessons/interpreting-and-presenting-data-in-pictograms-and-bar-charts-6tk3ar?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/interpreting-line-graphs-cmr3ec?step=1&activity=video	Learn the strategy: https://vimeo.com/425117781/1c09ed8f53 And: https://vimeo.com/425117859/697298bc90

5 Chapter 14: Graphs and averages					
Lesson 2: Calculating the Mean To calculate the mean.	**Lesson 5: Showing Information on Graphs** To show information on graphs; to transfer information from a table to a pie chart.	**Lesson 6: Reading Pie Charts** To read and interpret pie charts.	**Lesson 7: Reading Pie Charts** To read and interpret pie charts; to use percentages in pie charts.	**Lesson 9: Reading Line Graphs** To read line graphs; to interpret the information in line graphs.	**Lesson 10: Reading Line Graphs** To read & interpret line graphs; to answer questions about the graph information.
Learn the strategy: https://vimeo.com/425479084/0251b8b5d8 And: https://classroom.thenational.academy/lessons/interpret-mean-as-an-average-60t32d?step=1&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/tables-and-line-graphs-6xgk0t?step=2&activity=video And: https://classroom.thenational.academy/lessons/interpret-pie-charts-ccr6ad?step=1&activity=video	Learn the strategy: Reminder from yesterday: https://classroom.thenational.academy/lessons/interpret-pie-charts-ccr6ad?step=1&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/comparing-pie-charts-c5hpce?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/interpret-line-graphs-chk38d?step=2&activity=video	Learn the strategy: (up to 13 minutes and 18 seconds) https://classroom.thenational.academy/lessons/construct-line-graphs-74vk0d?step=2&activity=video

6		Recap Roman Numerals		Chapter 14: Roman Numerals	
Recap comparing fractions less than 1	**Recap fractions greater than 1**	**Recap Roman numerals to 100 Year 4, Bk 4B, Chapter 14, Lesson 2**	**Recap Roman numerals to 1000: year 5, Bk 5B, Chapter 14, lesson 2**	**Lesson 1: Writing Roman Numerals to & in thousands** To write Roman numerals to 1000.	**Lesson 2: Writing Roman Numerals to & in thousands** To write numbers in their thousands in Roman numerals.
Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/compare-fractions-less-than-one-c4ukcc	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/compare-fractions-greater-than-one-c8vkgr	Learn the strategy: https://classroom.thenational.academy/lessons/investigating-roman-numerals-up-to-100-6guk8c?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/solving-problems-involving-roman-numerals-6gt36d?step=2&activity=video	Learn the strategy: Reminder from yesterday https://classroom.thenational.academy/lessons/investigating-roman-numerals-up-to-1000-61k32r?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/solving-problems-involving-roman-numerals-6gt36d?step=2&activity=video

Half term

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Summer term 2 2020-21					
1 Revisiting prior learning to consolidate and embed					
Revisit problem solving with decimal amounts	Revisit formal division methods with remainders	Revisit formal methods using measures word problems (incl. converting measures)	Revisit representing fractions	Revisit comparing fractions	Revisit addition and subtraction of fractions
Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/problem-solving-with-decimals-in-context-60u3gd	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/solving-problems-involving-division-with-remainders-part-2-6muk4d	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/decimals-and-measures-solving-problems-including-the-conversion-of-standard-units-of-measure-6nhp8e	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/to-identify-describe-and-represent-fractions-ccw3ee	Learn the strategy: Complete the online lesson: Fractions less than 1: https://classroom.thenational.academy/lessons/compare-fractions-less-than-one-c4ukcc Then, fractions greater than 1: https://classroom.thenational.academy/lessons/compare-fractions-greater-than-one-c8vkgr	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/add-fractions-cnk3ar Then: https://classroom.thenational.academy/lessons/subtract-fractions-6hh66r
2 Revisiting prior learning to consolidate and embed					
Revisit fraction word problems	Revisit multiplying fractions	Revisit fractions of amounts	Revisit percentages of amounts	Revisit problem solving, including converting measures	Revisit order of operations
Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/fractions-problem-solving-c9k38d	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/multiply-a-fraction-by-a-whole-number-cgup2t Then: https://classroom.thenational.academy/lessons/multiply-a-mixed-number-fraction-6njk6t Or: https://classroom.thenational.academy/lessons/fractions-represent-multiplication-with-proper-fractions-c9h64e	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/fractions-of-quantities-1-6wuk6r Then: https://classroom.thenational.academy/lessons/fractions-of-quantities-part-2-cmt36t	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/finding-percent-of-a-quantity-6xh36d Then: https://classroom.thenational.academy/lessons/solve-problems-involving-the-calculation-of-percentages-of-amounts-c5gkge	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/solving-problems-involving-various-units-of-measure-68v3ae	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/consolidating-order-of-operations-68t34d
3 Revisiting prior learning to consolidate and embed					
Revisit 'common factor' and 'common multiple' as properties of a number Exploring factors and multiples of numbers, including identifying common factors and multiples.	Revisit decimals and measures: Convert between standard measures Converting between grams and kilograms and problems involving mass.	Revisit decimals and measures: Standard Units In today's lesson, we will learn to select and estimate the correct unit of measure and read scales measuring length, mass and volume.	Revisit decimal equivalents of fractions Converting a fraction to a decimal using different strategies.	Revisit interpreting graphs: Interpret Line Graphs In today's lesson, we will explore discrete and cumulative data and interpret different types of line graphs.	Revisit co-ordinates: Solving practical coordinate problems Solving problems involving coordinates.
Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/understand-the-terms-common-factor-and-common-multiple-as-properties-of-a-number-cdk68c	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/decimals-and-measures-convert-between-standard-measures-6cupac	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/decimals-and-measures-standard-units-cdjk0r	Learn the strategy: Complete the online lessons: https://classroom.thenational.academy/lessons/decimal-equivalents-of-fractions-cnh32r	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/interpret-line-graphs-chk38d	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/solving-practical-coordinate-problems-part-1-c9h3ec

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4 Revisiting prior learning to consolidate and embed

Revisit geometry: Find the value of missing angles	Revisit geometry: Find the value of missing angles in quadrilaterals	Revisit geometry: Find unknown angles in triangles	Revisit decimals and measures: Convert standard lengths	Revisit problem solving: Reasoning and problem solving	Revisit estimating and rounding contexts
Deepening understanding of angles by applying your understanding to find and calculate missing angles within diagrams and 2-D shapes.	Representing the angles in a quadrilateral pictorially and algebraically before learning how to calculate missing angles.	Representing the angles in a triangle pictorially and algebraically before learning how to calculate missing angles.	In today's lesson, we will convert between standard units of length - millimetres, centimetres, metres and kilometres.	In this lesson we will explore two types of problem in depth, thinking carefully about how to represent each problem in order to help us find a solution.	Developing number sense and applying the skills of rounding and estimating linked to everyday situations.
Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/find-the-value-of-missing-angles-6cr3je	**Learn the strategy: Complete the online lesson:** https://classroom.thenational.academy/lessons/find-the-value-of-missing-angles-in-quadrilaterals-cdgk0r	**Learn the strategy: Complete the online lessons:** https://classroom.thenational.academy/lessons/find-unknown-angles-in-triangles-6tgkcd	**Learn the strategy: Complete the online lessons:** https://classroom.thenational.academy/lessons/decimals-and-measures-convert-standard-lengths-60tkad	**Learn the strategy: Complete the online lesson:** https://classroom.thenational.academy/lessons/reasoning-and-problem-solving-6mwkct	**Learn the strategy: Complete the online lesson:** https://classroom.thenational.academy/lessons/estimating-and-rounding-contexts-6gw34d

5 Revisiting prior learning to consolidate and embed

Revisit fractions: Multiply and divide with improper fractions	Revisit fractions: Solve fraction problems with the four operations	Revisit ratio: Use ratio to express relationships	Revisit scaling: Solve problems involving scale factor in shapes	Revisit scaling: Solve problems involving the relative size of two quantities (Part 1)	Revisit scaling: Solve problems involving the relative size of two quantities (Part 2)
In today's lesson, we will learn strategies for multiplying and dividing with mixed numbers and improper fractions.	In today's lesson, we will revise calculating with fractions using the four operations and then apply this to word problems.	In today's lesson, we will use ratio to express relationships.	In today's lesson, we will solve problems involving scale factor.	In this lesson, we will solve problems involving the relative size of two quantities.	In this lesson, we will solve problems involving the relative size of two quantities, where multi-step scaling is necessary.
Complete the online lesson: https://classroom.thenational.academy/lessons/fractions-multiply-and-divide-with-improper-fractions-74tk8c	**Complete the online lesson:** https://classroom.thenational.academy/lessons/fractions-solve-fraction-problems-with-the-four-operations-cgrk0d	**Complete the online lesson:** https://classroom.thenational.academy/lessons/use-ratio-to-express-relationships-70tpad	**Complete the online lesson:** https://classroom.thenational.academy/lessons/solve-problems-involving-scale-factor-in-shapes-c4u3ar	**Complete the online lesson:** https://classroom.thenational.academy/lessons/solve-problems-involving-the-relative-size-of-two-quantities-part-1-68r6ac	**Complete the online lesson:** https://classroom.thenational.academy/lessons/solve-problems-involving-the-relative-size-of-two-quantities-part-2-61k68d

6 Revisiting prior learning to consolidate and embed

Revisit algebra: Expressing missing numbers algebraically	Revisit algebra: Expressing missing number problems algebraically	Revisit algebra: Finding solutions to problems with two variables	Revisit negative numbers through co-ordinates: Solving practical coordinate problems (Part 2)	Revisit measures problems: Decimals and measures: Solving problems with length	Revisit measures problems: Decimals and measures: calculation and conversion of units of area
In this lesson we will be finding the unknown values in algebraic expressions.	In this lesson we will be exploring various problems and representing them using algebra	In this lesson we will be discussing how to work systematically to find all possibilities for problems with two variables.	In today's lesson, we will use the general rules that we learnt in lesson four of this unit to solve more complex problems involving coordinates.	In today's lesson, we will solve problems involving calculating the area and perimeter of rectilinear shapes, including compound rectilinear shapes, where the conversion of measure is needed.	In today's lesson, we will be investigating the relationship between square millimetres, centimetres and metres, then apply this understanding to calculating area.
Complete the online lesson: https://classroom.thenational.academy/lessons/expressing-missing-numbers-algebraically-ccwpcc	**Complete the online lesson:** https://classroom.thenational.academy/lessons/expressing-missing-number-problems-algebraically-c8v64r	**Complete the online lesson:** https://classroom.thenational.academy/lessons/finding-solutions-to-problems-with-two-variables-cmt30r	**Complete the online lesson:** https://classroom.thenational.academy/lessons/solving-practical-coordinate-problems-part-2-6hh34e	**Complete the online lesson:** https://classroom.thenational.academy/lessons/decimals-and-measures-solving-problems-with-length-cdk32e	**Complete the online lesson:** https://classroom.thenational.academy/lessons/decimals-and-measures-calculation-and-conversion-of-units-of-area-c4ukar

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7 Revisiting prior learning to consolidate and embed					
Revisit fractions: Fractions problem solving In today's lesson, we will be learning how to solve fraction problems relating to shape, including calculating the perimeter and finding missing lengths.	**Revisit shape: Find unknown angles in triangles** In today's lesson, we will represent the angles in a triangle pictorially and algebraically before learning how to calculate missing angles.	**Revisit graphs and data: Interpret Pie Charts** In today's lesson, we will learn to interpret pie charts.	**Revisit mental strategies: Thinking flexibly** In today's lesson, we will learn to think flexibly, looking for the most efficient strategies we can find for subtraction.	**Revisit mental strategies: Solve calculations mentally by relating them to known facts** In today's lesson will be solving calculations mentally by relating them to known facts.	**Revisit number: Balancing equations to find unknown values** In today's lesson, we will learn to balance equations to find unknown values. We will learn how the image of a see-saw helps us think about equivalent calculations, if they are level, they are equal (equivalent) to each other.
Complete the online lesson: https://classroom.thenational.academy/lessons/fractions-problem-solving-c9k38d	**Complete the online lesson:** https://classroom.thenational.academy/lessons/find-unknown-angles-in-triangles-6tgkcd	**Complete the online lesson:** https://classroom.thenational.academy/lessons/interpret-pie-charts-ccr6ad	**Complete the online lesson:** https://classroom.thenational.academy/lessons/thinking-flexibly-74t3jr	**Complete the online lesson:** https://classroom.thenational.academy/lessons/solve-calculations-mentally-by-relating-them-to-known-facts-crt64d	**Complete the online lesson:** https://classroom.thenational.academy/lessons/balancing-equations-to-find-unknown-values-6nk3ge