Year 6 spring home learning overview

Quality First Education Trust

1 Spring term 1 Year 4 Decimals Recap

Bank Holiday	INSET day	**ADDITIONAL LESSON: Recap year 4 fractions: Bk 4B, Ch. 8, Lesson 8: Writing Decimals** To write decimal numbers.	**ADDITIONAL LESSON: Recap year 4 fractions: Bk 4B, Ch. 8, Lesson 11: Comparing and Ordering Decimals** To compare & order decimals	**ADDITIONAL LESSON: Recap year 4 fractions: Bk 4B, Ch. 8, Lesson 14: Rounding decimals** To round decimal numbers.	**ADDITIONAL LESSON: Recap year 4 fractions: Bk 4B, Ch. 8, Lesson 16 AND 17: Dividing Whole Numbers by 100** To divide by 100&10.
		Learn the strategy: https://classroom.thenational.academy/lessons/recognising-decimal-hundredths-part-1-c4v3ed?step=2&activity=video https://classroom.thenational.academy/lessons/recognising-decimal-hundredths-part-2-cmukcd?step=2&activity=video	**Learn the strategy:** https://www.khanacademy.org/math/4th-engage-ny/engage-4th-module-6/4th-module-6-topic-c/v/comparing-decimals-with-hundredths	**Learn the strategy:** https://classroom.thenational.academy/lessons/rounding-decimals-part-2-64t38t?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/multiplying-and-dividing-by-100-part-1-68vk6c?step=2&activity=video https://classroom.thenational.academy/lessons/multiplying-and-dividing-by-100-part-2-6ngkcc?step=2&activity=video

2 Year 5 Decimals Recap   Year 6 Decimals Chapter 4

ADDITIONAL LESSON: Recap Yr 5, Bk 5B, Chapter 7: Lesson 3: Reading and Writing Decimals To read and write decimals.	**ADDITIONAL LESSON: Recap Yr 5, Bk 5B, Chapter 7: Lesson 7: Writing Fractions as Decimals** To write fractions as decimals.	**ADDITIONAL LESSON: Yr 5, Bk 5B, Chapter 7: Lesson 10: Add & Subtract Decimals** To add and subtract amounts in pounds & pence.	**ADDITIONAL LESSON: Yr 5, Bk 5B, Chapter 7: Lesson 14: Adding and Subtracting Decimals** To add and subtract the perimeter using decimals.	**ADDITIONAL LESSON: Yr 5, Bk 5B, Chapter 7: Lesson 15: Rounding Decimals** To round decimals to the nearest whole. & numbers to nearest tenth.	**Lesson 1: Writing and Reading Decimals** To read and write decimals to thousandths; to use concrete materials to represent decimals.
Learn the strategy: https://classroom.thenational.academy/lessons/thousandths-6wup6t?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/tenths-and-hundredths-6nj68c?step=2&activity=video https://classroom.thenational.academy/lessons/comparing-fractions-and-decimals-c5jp8r?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/solving-problems-with-decimals-using-addition-and-subtraction-6gu6ad **Recap column addition and subtraction:** https://classroom.thenational.academy/lessons/applying-and-consolidating-column-method-for-addition-and-subtraction-cgvpcc?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/deriving-decimal-addition-and-subtraction-facts-6gu30c?step=2&activity=video	**Learn the strategy:** **Part 1:** https://classroom.thenational.academy/lessons/rounding-decimals-part-1-70r6at?step=2&activity=video **Part 2:** https://classroom.thenational.academy/lessons/rounding-decimals-part-2-74rkgc?step=2&activity=video	**Learn the strategy: (up to 5 minutes and 18 seconds)** https://classroom.thenational.academy/lessons/decimals-and-measures-to-generate-and-describe-linear-number-6xh3je?step=1&activity=video **Or use:** https://classroom.thenational.academy/lessons/place-value-to-3-decimal-places-6crpat?step=2&activity=video

3 Chapter 4: Decimals

Lesson 2: Dividing Whole Numbers To divide numbers by larger whole numbers; to use Dienes to represent 1/10s, 1/100s & 1/1000s.	**Lesson 3: Dividing Whole Numbers** To divide numbers making decimals; calculate decimal fraction equivalents long division. METHOD 2	**Lesson 5: Writing Fractions as Decimals** To write fractions as decimals; to use long division as the key strategy	**Lesson 6 AND 7: Multiplying Decimals** To multiply decimals by whole numbers using partitioning or the worded method.	**Lesson 8: Multiplying Decimals** To multiply decimals by whole numbers (Use L9 as deepening)	**Lesson 10: Dividing Decimals** To divide decimals using number bonds and number discs as the key strategies. (Method 2)
Learn the strategy: (from 9 minutes and 8 seconds) https://classroom.thenational.academy/lessons/multiply-and-divide-by-10-100-and-1000-involving-decimals-64wk6r?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/decimal-equivalents-of-fractions-cnh32r?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/multiply-a-decimal-number-by-a-whole-number-6mwpcd?step=2&activity=video **Or use: (from 40 seconds)** https://vimeo.com/421130951/7363b38b78	**Learn the strategy:** https://classroom.thenational.academy/lessons/use-formal-written-methods-for-short-multiplication-including-multiplying-decimals-6rvp2r?step=2&activity=video https://classroom.thenational.academy/lessons/multiplying-decimals-by-a-whole-number-6xjkcr?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/multiplying-decimals-by-a-whole-number-6xjkcr?step=2&activity=video https://classroom.thenational.academy/lessons/division-of-a-decimal-number-by-an-integer-c8t30e?step=2&activity=video	

Year 6 spring home learning overview

Quality First Education Trust

4 Chapter 4: Decimals					
Lesson 11: Dividing Decimals To divide decimals using bar models, number bonds and long division as key strategies,	**Lesson 12: Multiplying a Decimal by a 2-Digit Whole Number** To multiply decimals by a 2-digit whole number	**Lesson 13: Dividing a Decimal by a 2-Digit Whole Number** To divide decimals by 2-digit numbers	**Lesson 14: Dividing a Decimal by a 2-Digit Whole Number** To divide decimals by 2-digit whole numbers	**Lesson 1: Converting Units of Length** To convert common measurements to metres, centimetres and millimetres.	**Lesson 2: Converting Units of Length** To convert units of measure into different units using decimals and fractions
<u>Learn the strategy: (as previous)</u> https://classroom.thenational.academy/lessons/multiplying-decimals-by-a-whole-number-6xjkcr?step=2&activity=video https://classroom.thenational.academy/lessons/division-of-a-decimal-number-by-an-integer-c8t30e?step=2&activity=video	<u>Learn the strategy: (from 19 minutes)</u> **https://classroom.thenational.academy/lessons/multiply-by-a-two-digit-number-using-long-multiplication-75k3cc?step=2&activity=video**	<u>Learn the strategy: Use the long division strategy:</u> https://classroom.thenational.academy/lessons/use-the-formal-written-method-of-long-division-to-solve-appropriate-calculations-c8wk0c?step=2&activity=video https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations/cc-6th-dividing-decimals/v/dividing-a-decimal-by-a-whole-number	<u>Learn the strategy: Use the long division strategy:</u> https://classroom.thenational.academy/lessons/use-the-formal-written-method-of-long-division-to-solve-appropriate-calculations-c8wk0c?step=2&activity=video https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations/cc-6th-dividing-decimals/v/dividing-a-decimal-by-a-whole-number	<u>Learn the strategy: (up to 23 minutes and 18 seconds)</u> https://classroom.thenational.academy/lessons/decimals-and-measures-convert-standard-lengths-60tkad?step=2&activity=video	

5				Chapter 7: Percentage	
Lesson 3: Converting Units of Length To convert metres into kilometres as units of measure.	**Lesson 4: Converting Units of Mass** To convert units of mass from grams to kilograms using decimals and fractions.	**Lesson 5: Converting Units of Volume** To convert units of volume from millilitres to litres.	**ADDITIONAL LESSON: Decimals and measures: Convert between units of time** To convert between units of time, equivalent times and solve problems involving time.	**ADDITIONAL LESSON: Recap Yr 5 percentages: Bk 5B, Ch 8, Lesson 2: Finding Percentages** To convert values of an amount into %. To convert fractions into percentages.	**ADDITIONAL LESSON: Recap year 5 percentages: Bk 5B, Chapter 8, Lesson 3: Finding Percentages**
<u>Learn the strategy:(from 23 minutes and 19 seconds)</u> **https://classroom.thenational.academy/lessons/decimals-and-measures-convert-standard-lengths-60tkad?step=2&activity=video**	<u>Learn the strategy:</u> https://classroom.thenational.academy/lessons/decimals-and-measures-convert-between-standard-measures-6cupac?step=2&activity=video	<u>Learn the strategy:</u> https://classroom.thenational.academy/lessons/converting-measurements-cdj62t?step=2&activity=video	<u>Complete the online lesson:</u> https://classroom.thenational.academy/lessons/decimals-and-measures-convert-between-units-of-time-c4r66c	<u>Learn the strategy:</u> https://classroom.thenational.academy/lessons/understanding-percentage-6gvpad?step=2&activity=video	

6 Chapter 7: Percentage				Catch up time	
Lesson 1: Finding the Percentage of a Number To find the % of a whole number using division & multiplication; to use bar models as pictorial approach to calculating %.	**Lesson 2: Finding the Percentage of a Quantity** To find % of a quantity; to use bar models to support division & multiplication of numbers towards the percentage.	**Lesson 3: Finding Percentage Change** To find % change in an amount over time; to calculate % change where the number gives rise to a decimal.	**ADDITIONAL LESSON: Solve problems involving the use of percentages for comparison** To solve problems involving the use of percentages for comparison.	Revisit any worksheets that have not been completed so far from this half term.	Revisit any worksheets that have not been completed so far from this half term.
<u>Learn the strategy:</u> https://classroom.thenational.academy/lessons/finding-percent-of-a-quantity-6xh36d?step=2&activity=video	<u>Learn the strategy:(up to 5 minutes and 34 seconds)</u> https://classroom.thenational.academy/lessons/percentages-of-amount-part-2-c9j66c?step=2&activity=video <u>Method 3: (up to 4 minutes and 49 seconds)</u> https://classroom.thenational.academy/lessons/percentages-of-amount-6nj68r?step=2&activity=video	<u>Learn the strategy:</u> https://classroom.thenational.academy/lessons/solve-problems-involving-the-calculation-of-percentages-of-amounts-c5gkge <u>(up to 2 minutes and 8 seconds)</u> https://classroom.thenational.academy/lessons/increase-by-a-percentage-69h68c?step=2&activity=video	<u>Complete the online lesson</u> https://classroom.thenational.academy/lessons/solve-problems-involving-the-use-of-percentages-for-comparison-6mtk6t		

Half term break

Year 6 spring home learning overview

7   Spring 2   Chapter 8: Ratio

ADDITIONAL LESSON: Fractions, decimals and equivalence problems	Lesson 2: Comparing Quantities To find ratio of a quantity; to simplify ratios using division; compare more than two quantities using the term 'ratio'; to use bar models.	Lesson 3: Comparing Quantities To find ratio of a quantity; to simplify ratios using division; compare more than two quantities using the term 'ratio'; to use bar models.	Lesson 4: Comparing Quantities To compare quantity using both fractions and ratios; to use bar model diagrams to represent ratios.	Lesson 6: Comparing Numbers To compare numbers using ratios; to make decisions about simplifying ratios using division	ADDITIONAL LESSON: Ratio problems In this lesson, we will be solving problems using knowledge of ratio.
Learn the strategy: Complete the online lesson https://classroom.thenational.academy/lessons/recall-and-use-equivalences-between-fractions-decimals-and-percentages-6dh6cc	**Learn the strategy:** https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates/pre-algebra-ratios-intro/v/ratios-intro	**Learn the strategy:** https://classroom.thenational.academy/lessons/use-ratio-to-express-relationships-70tpad?step=2&activity=video		**Learn the strategy:** https://classroom.thenational.academy/lessons/solve-problems-involving-the-relative-size-of-two-quantities-part-1-68r6ac?step=2&activity=video	**Complete the online lesson** https://classroom.thenational.academy/lessons/ratio-problems-c5hk4r

8   Chapter 9: Algebra   Consolidation

Lesson 2: Describing a Pattern To generate and describe number patterns. (Could also do worksheets 3)	Lesson 5: Writing Algebraic Expressions To express algebraically a missing number. (Could also do worksheets L4)	Lesson 10: Solving Equations To solve equations; to use equations to find unknown values.	ADDITIONAL LESSON: Finding solutions to problems with two variables To work systematically to find all possibilities for problems with two variables.	ADDITIONAL LESSON: Consolidating order of operations To apply our understanding of order of operations to problems.	Revisit as needed: Multiplication and division (including multi-step word problems and measures)
Learn the strategy: https://classroom.thenational.academy/lessons/consolidating-linear-sequences-and-representing-problems-with-algebra-71j3gr?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/reasoning-and-problem-solving-6mwkct?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/expressing-missing-numbers-algebraically-ccwpcc?step=2&activity=video	**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/consolidating-order-of-operations-68t34d	**Complete the online lesson** https://classroom.thenational.academy/lessons/solve-problems-involving-division-with-remainders-part-1-6hjp6t

9   Chapter10: Area & perimeter

ADDITIONAL LESSON: Recap year 5 area and perimeter: Bk 5B, Chapter 12, Lesson 1: Finding the Perimeter To find the perimeter of shapes.	ADDITIONAL LESSON: Recap year 5 area and perimeter: Bk 5B, Chapter 12, Lesson 6: Measuring the Area To measure the area of squares.	Lesson 1: Finding the Area and the Perimeter of Rectangles To find area & perimeter of rectangles; calculate perimeter using known area and vice versa.	ADDITIONAL LESSON: Recap year 5 area and perimeter: Bk 5B, Chapter 12, Lesson 7: Measuring the Area To measure the area of a shape. (Measuring area of compound shapes)	Lesson 2: Finding the Area of Parallelograms To find and calculate area of a parallelogram; to use prior understanding of area & materials to construct a formula for the area.	Lesson 3: Finding the Area of Triangles To use prior knowledge of area to solve the area of a triangle; to use formula for the area of a rectangle to solve problems involving triangles.
Learn the strategy: https://classroom.thenational.academy/lessons/calculate-the-perimeter-of-simple-compound-shapes-c9gp8r?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/calculate-and-compare-the-area-of-rectangles-using-square-centimetres-cm-69h6cd?step=1&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/investigate-the-relationship-between-area-and-perimeter-and-use-this-knowledge-to-solve-problems-cct3cc?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/rectilinear-shapes-6wr34r?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/area-of-parallelograms-6wup2e?step=2&activity=video	**Learn the strategy: (up to 6 minutes and 45 seconds)** https://classroom.thenational.academy/lessons/area-of-triangles-6cwkar?step=2&activity=video

Year 6 spring home learning overview

10 Ch10: Area & perimeter	Chapter 11: Volume				Geometry Recap Year 5
Lesson 4: Finding the Area of Triangles To calculate the area of a triangle using a formula; to calculate the area of a triangle in multiple ways.	**ADDITIONAL LESSON: Recap Year 5 volume: Bk 5B, Chapter 13, Lesson 3: Finding the Volume of Solids** To find the volume of solids.	**Lesson 1 and 2: Finding the Volume of Cubes and Cuboids** To find the volume of cubes and cuboids using materials. To determine formula for volume of cubes & cuboids & apply it to calculate volume.	**Lesson 4: Finding the Volume of Cubes and Cuboids** To calculate the volume of boxes using the formula for volume of a cube; to expose common misconceptions in volume.	**ADDITIONAL LESSON: Recap Year 5 volume: Bk 5B, Chapter 13, Lesson 6: Converting Units of Volume** To compare and convert units of volume.	**ADDITIONAL LESSON: Recap Year 5 geometry: Bk 5B, Chapter 9: Lesson 1: Knowing Types of Angles** To know angle name & qualities: acute, right, obtuse, reflex.
Learn the strategy: (up to 3 minutes) https://classroom.thenational.academy/lessons/further-triangles-68u6ae?step=2&activity=video	**Learn the strategy:** https://vimeo.com/427271112/69062a1937 **And:** https://vimeo.com/427276443/4b13f4c7bb	**Learn the strategy:** https://classroom.thenational.academy/lessons/to-describe-volume-in-cubic-units-6hhkjd?step=2&activity=video **And:** https://classroom.thenational.academy/lessons/to-describe-volume-in-cubic-units-6hhkjd?step=2&activity=video		**Learn the strategy: (up to 4 minutes and 8 seconds)** https://classroom.thenational.academy/lessons/problem-solving-with-decimals-in-context-60u3gd?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/compare-and-order-acute-obtuse-and-reflex-angles-6dhk6d?step=2&activity=video
11 Chapter 12: Geometry					
ADDITIONAL LESSON: Recap Year 5 geometry: Bk 5B, Chapter 9: Lesson 2: Measuring Angles To measure angles using a protractor.	**Lesson 1: Investigating Vertically Opposite Angles** To investigate opposite angles; to use prior knowledge of angles to solve problems.	**Lesson 3: Investigating Angles in Triangles** To determine and show the sum of the angles inside a triangle.	**Lesson 4: Investigating Angles in Quadrilaterals** To investigate and determine angles in quadrilaterals.	**ADDITIONAL LESSON: Recap Year 5 geometry: Bk 5B, Ch 9: Lesson 5: Investigating Angles at a Point** To investigate angles that add up to 360º.	**Lesson 6: Naming Parts of a Circle** To name the parts of a circle; to calculate diameter and radius using parts of a circle.
Learn the strategy: https://classroom.thenational.academy/lessons/reading-angles-on-a-protractor-part-1-6mt3gt?step=2&activity=video **Then:** https://classroom.thenational.academy/lessons/reading-angles-on-a-protractor-part-2-6mt30d?step=2&activity=video	**Learn the strategy:** https://vimeo.com/412752887/402efb9f17	**Learn the strategy:** https://vimeo.com/412302557/9fc6a6e402 **And:** https://classroom.thenational.academy/lessons/find-unknown-angles-in-triangles-6tgkcd?step=2&activity=video	**Learn the strategy:** https://vimeo.com/412302740/51f3e58179 **And:** https://classroom.thenational.academy/lessons/find-the-value-of-missing-angles-in-quadrilaterals-cdgk0r?step=2&activity=video	**Learn the strategy:** https://classroom.thenational.academy/lessons/calculating-angles-on-a-line-or-around-a-point-69h66t?step=2&activity=video **Or:** https://classroom.thenational.academy/lessons/find-the-value-of-missing-angles-6cr3je?step=1&activity=video	**Learn the strategy:** https://vimeo.com/412316220/595434faac **And:** https://classroom.thenational.academy/lessons/coordinates-and-shapes-to-illustrate-and-name-parts-of-a-circle-69hkec?step=2&activity=video
12 Chapter 12: Geometry			**Catch up time**		
Lesson 7: Solving Problems Involving Angles in a Circle To solve problems involving angles in a circle.	**Lesson 8: Drawing Quadrilaterals** To draw quadrilaterals with specific lengths & parallel lines; to find perimeter of shapes, name trapeziums & parallelograms	**Combined lesson: Lesson 9 and 10: Drawing Triangles** To draw triangles using measurements and angles as starting point; protractor to draw angles.	Revisit any worksheets that have not been completed so far from this half term.	Revisit any worksheets that have not been completed so far from this half term.	Revisit any worksheets that have not been completed so far from this half term.
Learn the strategy: https://classroom.thenational.academy/lessons/coordinates-and-shapes-to-solve-practical-problems-involving-circles-68u36d?step=2&activity=video	**Learn the strategy: (from 8 minutes and 23 seconds to 13 minutes and 3 seconds)** https://classroom.thenational.academy/lessons/quadrilateral-problems-68t6cc?step=2&activity=video **And: (up to 15 minutes and 40 seconds)** https://classroom.thenational.academy/lessons/to-compare-and-classify-quadrilaterals-6rv62t?step=2&activity=video	**Recap drawing angles using a protractor:** https://classroom.thenational.academy/lessons/draw-angles-with-a-protractor-1-60rp4e?step=2&activity=video **Learn the strategy:** https://classroom.thenational.academy/lessons/solve-problems-involving-scale-factor-in-shapes-c4u3ar?step=2&activity=video			
Easter Break					