

Year 6 spring home learning overview 2020-21

1 Spring term 2020-21					
Chapter 4: Decimals					
INSET day	Recap multiplying decimals or complete 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)	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 using number bonds and the worded method.
	Learn the strategy: https://classroom.thenational.academy/lessons/use-formal-written-methods-for-short-multiplication-including-multiplying-decimals-6rnp2r?step=2&activity=video https://classroom.thenational.academy/lessons/multiplying-decimals-by-a-whole-number-6xjkr?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/multiplying-decimals-by-a-whole-number-6xjkr?step=2&activity=video https://classroom.thenational.academy/lessons/division-of-a-decimal-number-by-an-integer-c8t30e?step=2&activity=video	Learn the strategy: (from 19 minutes) https://classroom.thenational.academy/lessons/multiply-by-a-two-digit-number-using-long-multiplication-75k3cc?step=2&activity=video	Learn the strategy: 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	
2 Chapter 4: Decimals			Chapter 5: Measurements		
Lesson 14: Dividing a Decimal by a 2-Digit Whole Number To divide decimals by 2-digit whole numbers	Addition and subtraction strategies and links	Recap year 5 measurement: Bk 5B, Chapter 11: Lesson 3: Converting Units of Length To convert units of length.	Recap year 5 measurement: Bk 5B, Chapter 11: Lesson 7: Converting Units of Mass To convert units of mass.	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
Learn the strategy: Use the long division strategy: 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	Complete the online lesson: Addition: https://classroom.thenational.academy/lessons/strategies-for-addition-6nj4d Subtraction: https://classroom.thenational.academy/lessons/strategies-for-subtraction-6mv32d	Learn the strategy: https://classroom.thenational.academy/lessons/converting-lengths-part-1-cgr3jd?step=2&activity=video https://classroom.thenational.academy/lessons/converting-lengths-part-2-64ukar?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/converting-between-units-of-metric-mass-6ww38d?step=2&activity=video	Learn the strategy: (up to 23 minutes and 18 seconds) https://classroom.thenational.academy/lessons/decimals-and-measures-convert-standard-lengths-60tkad?step=2&activity=video	
3 Chapter 5: Measurements					
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.	Converting units of time	Recap year 5 measurement: Bk 5B, Chapter 11: Lesson 14: Telling the Temperature (incl. negative)	Recap rounding
Learn the strategy:(from 23 minutes and 19 seconds) https://classroom.thenational.academy/lessons/decimals-and-measures-convert-standard-lengths-60tkad?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/decimals-and-measures-convert-between-standard-measures-6cupac?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/converting-measurements-cdj62t?step=2&activity=video	Complete the online lesson: https://classroom.thenational.academy/lessons/decimals-and-measures-convert-between-units-of-time-c4r66c?step=1&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/negative-numbers-in-context-68t66c?step=1&activity=video https://classroom.thenational.academy/lessons/further-addition-6rwk2t?step=2&activity=video	Recap addition and subtraction in context Complete the online lessons: Rounding: https://classroom.thenational.academy/lessons/rounding-to-a-required-degree-of-accuracy-6wu32t Addition and subtraction: https://classroom.thenational.academy/lessons/applying-addition-and-subtraction-74tp2d

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4		Chapter 7: Percentage			
MNP Year 6 mid-year revision 6A assessment	MNP Year 6 mid-year revision 6A assessment	Order of operations	Recap year 5 percentages: Bk 5B, Chapter 8, Lesson 2: Finding Percentages To be able to convert values of an amount into %. To be able to convert fractions into percentages.	Lesson 1: Finding the Percentage of a Number To find the % of a whole number using division and multiplication; to use bar modelling as a pictorial approach to calculating %.	Lesson 2: Finding the Percentage of a Quantity To find the % of a quantity; to use bar model diagrams to support the division and multiplication of numbers towards the percentage.
Complete workbook 6A mid-year revision section A and part of section B. Questions 1 - 25	Complete workbook 6A mid-year revision remainder of section B and section C. Questions 26 - 45	Learn the strategy: Complete the online lesson: https://classroom.thenational.academy/lessons/order-of-operations-ctk3et	Learn the strategy: https://classroom.thenational.academy/lessons/understanding-percentage-6qvpad?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/finding-percent-of-a-quantity-6xh36d?step=2&activity=video	Learn the strategy:(up to 5 minutes and 34 seconds) https://classroom.thenational.academy/lessons/percentages-of-amount-part-2-c9j66c?step=2&activity=video Method 3: (up to 4 minutes and 49 seconds) https://classroom.thenational.academy/lessons/percentages-of-amount-6nj68r?step=2&activity=video
5 Chapter 7: Percentage		Chapter 8: Ratio			
Lesson 3: Finding Percentage Change To find % change in an amount over time; to calculate % change where the number gives rise to a decimal.	Problem solving with percentages:	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.
Learn the strategy: https://classroom.thenational.academy/lessons/solve-problems-involving-the-calculation-of-percentages-of-amounts-c5gkge (up to 2 minutes and 8 seconds) https://classroom.thenational.academy/lessons/increase-by-a-percentage-69h68c?step=2&activity=video	Learn the strategy: Complete the online lesson https://classroom.thenational.academy/lessons/solve-problems-involving-the-use-of-percentages-for-comparison-6mfk6t	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	
6 Chapter 8: Ratio		Chapter 9: Algebra		Revisit	Catch up time
Lesson 6: Comparing Numbers To compare numbers using ratios; to make decisions about simplifying ratios using division	Problem solving using ratio and scaling	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)	Revisit as needed: Multiplication and division (including multi-step word problems and measures)	
Learn the strategy: https://classroom.thenational.academy/lessons/solve-problems-involving-the-relative-size-of-two-quantities-part-1-68r6ac?step=2&activity=video	Learn the strategy: Complete the online lesson https://classroom.thenational.academy/lessons/ratio-problems-c5hk4r	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: Complete the online lesson https://classroom.thenational.academy/lessons/solve-problems-involving-division-with-remainders-part-1-6hjp6t	
Half term break					

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Spring 2 2020-21					
7 Chapter 9: Algebra		Recap year 5		Chapter 10: Area & perimeter	
Lesson 10: Solving Equations To solve equations; to use equations to find unknown values.	Recap year 5 area and perimeter: Bk 5B, Chapter 12, Lesson 1: Finding the Perimeter To find the perimeter of shapes.	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.	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 the area of a parallelogram; to use materials and prior understanding of area to construct a formula for the area.
Learn the strategy: https://classroom.thenational.academy/lessons/expressing-missing-numbers-algebraically-cwppc?step=2&activity=video	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
8 Chapter 10: Area and Perimeter		Recap		Chapter 11: Volume	
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.	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.	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.	Recap Year 5 volume: Bk 5B, Chapter 13, Lesson 6: Converting Units of Volume To compare and convert units of volume.
Learn the strategy: (up to 6 minutes and 45 seconds) https://classroom.thenational.academy/lessons/area-of-triangles-6cwkar?step=2&activity=video	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-6hhkj?step=2&activity=video And: https://classroom.thenational.academy/lessons/to-describe-volume-in-cubic-units-6hhkj?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	
9 Chapter 12: Geometry					
Recap Year 5 geometry: Bk 5B, Chapter 9, Lesson 1: Knowing Types of Angles To know angle name & qualities: acute, right, obtuse, reflex.	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.	Recap Year 5 geometry: Bk 5B, Chapter 9, Lesson 5: Investigating Angles at a Point To investigate angles that, when combined, make 360°.
Learn the strategy: https://classroom.thenational.academy/lessons/compare-and-order-acute-obtuse-and-reflex-angles-6dhk6d?step=2&activity=video	Learn the strategy: https://classroom.thenational.academy/lessons/reading-angles-on-a-protractor-part-1-6mf3qt?step=2&activity=video Then: https://classroom.thenational.academy/lessons/reading-angles-on-a-protractor-part-2-6mf30d?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-6tqkcd?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-cdgd0r?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

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10 Chapter 12: Geometry					
<p>Lesson 6: Naming Parts of a Circle To name the parts of a circle; to calculate diameter and radius using parts of a circle.</p>	<p>Lesson 7: Solving Problems Involving Angles in a Circle To solve problems involving angles in a circle.</p>	<p>Lesson 8: Drawing Quadrilaterals To draw quadrilaterals with specific side lengths & parallel lines; to find perimeter of shapes and name trapeziums and parallelograms</p>	<p>Lesson 9: Drawing Triangles To draw triangles using measurements and angles as starting point; protractor to draw angles.</p>	<p>Lesson 10: Drawing Triangles To draw triangles using measurements and angles as starting point; protractor to draw angles.</p>	<p>Lesson 11: Drawing Nets of Three-Dimensional Shapes To construct the nets of 3-D shapes by identify the faces in them.</p>
<p>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</p>	<p>Learn the strategy: https://classroom.thenational.academy/lessons/coordinates-and-shapes-to-solve-practical-problems-involving-circles-68u36d?step=2&activity=video</p>	<p>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-6rv62f?step=2&activity=video</p>	<p>Learn the strategy: Recap drawing angles using a protractor: https://classroom.thenational.academy/lessons/draw-angles-with-a-protractor-1-60rp4e?step=2&activity=video</p>	<p>Learn the strategy: https://classroom.thenational.academy/lessons/solve-problems-involving-scale-factor-in-shapes-c4u3ar?step=2&activity=video</p>	<p>Learn the strategy: https://classroom.thenational.academy/lessons/coordinates-and-shapes-to-recognise-nets-of-3d-shapes-crvk2r?step=2&activity=video</p>
11 Chapter 12:		Chapter 13: Position and Movement		Recap lessons to revise and consolidate	
<p>Lesson 12: Drawing Nets of Three-Dimensional Shapes To construct the nets of 3-D shapes by identify the faces in them.</p>	<p>Lesson 1: Showing Negative Numbers To represent negative numbers on both vertical and horizontal number lines.</p>	<p>Lesson 2: Describing Position To describe positions of objects on a coordinate grid; to use x & y axes to determine position on a grid.</p>			
<p>Learn the strategy: (as previous lesson) https://classroom.thenational.academy/lessons/coordinates-and-shapes-to-recognise-nets-of-3d-shapes-crvk2r?step=2&activity=video</p>	<p>Learn the strategy: https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-negative-number-topic/cc-6th-neg-num-intro/v/negative-numbers-introduction Or: https://classroom.thenational.academy/lessons/negative-numbers-in-context-68t66c</p>	<p>Learn the strategy: https://vimeo.com/429428268/e97257c390</p>			
12 Recap lessons to revise and consolidate					
			Easter Break		