Black - Main content to be taught

Italic – Daily fluency objectives

Purple – Challenge objectives

Learning objectives are not listed in a specific order and may be taught more than once to support learning progression.

October Half Term

HCAT Maths Year on a Page Year 5 – 2025/2026



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	Autumn Term 1			Autumn Term 2				Spring Term 1					
Week 1 01/09/25 3-day week Week 2 08/09/25	Place Value	To count forwards or backwards in steps of powers of 10 from any given number. To partition numbers to 1,000,000 to determine the value of each digit. To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers (including through zero). To read, write and compare numbers to 100,000 and determine the value of each digit. To read, write and compare numbers to 1,000,000 and determine the value of each digit. To order numbers to at least 1,000,000		Week 1 03/11/25	Decimals and Percentages	To compare and order fractions where the denominators are multiples of the same number. To identify, name and write equivalent fractions of a given fraction (including tenths and hundredths). To add fractions with the same denominator and denominators with multiples of the same number. To subtract fractions with the same denominator and denominators with multiples of the same number. To read and write decimal numbers as fractions. To read, write, order and compare numbers with up to 3dp. To round decimal numbers with 2dp to the nearest whole number and to 1dp. To recognise the % symbol and understand that % relates to number		Week 1 05/01/26	Place Value	To apply place value knowledge to accurately round decimal numbers to 1dp. To compare and order negative numbers. To read Roman numerals up to 1,000 (M) and recognise years written in Roman numerals. To apply rounding knowledge to solve place value problems. To find exact and approximate estimates of numbers, using the midpoints between numbers on a number line. To add and subtract larger numbers mentally.			
Week3 15/09/25		To find 10/100/1,000/10,000/100,000 more or less than a given number. To apply place value knowledge to accurately round any given number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 To apply place value knowledge to accurately round decimal numbers to the nearest whole number. To read Roman numerals up to 1,000 (M) and recognise years written in Roman numerals. Count fluently in 7s		Week 2 10/11/25	** Fractions,	of parts per 100. To write percentages as a fraction with denominator 100 and as a decimal fraction. To find fractions equivalent to a unit and non unit fraction. To calculation a % of an amount. To count in fractions/decimals on a number line.		Week 2 12/01/26	Addition & Subtraction	To select an appropriate method to solve multi step problems in context deciding which operations and methods to use and why. To use inverse operation, rounding and estimation to check answers. To use formal written method to subtract more than two numbers from one another. To use mental methods to solve simple problems involving negative and positive numbers. To add whole numbers and decimal numbers mentally.			
		To add and subtract numbers mentally with increasingly large numbers. To use a formal written method to add whole numbers with more than four digits (see calculation policy). To use a formal written method to add numbers up to 4 digits including decimals. To use a formal written method to subtract whole numbers with more than four digits (see calculation policy). To use a formal written method to subtract numbers up to 4 digits including decimals. To solve addition and subtraction missing number problems. To use rounding to check answers to calculations.		Week 3 17/11/25		Autumn Assessment Week				To identify prime and composite numbers. To establish whether a number up to 100 is prime and recall prime			
Week 4 22/09/25 Week 5	Addition & Subtraction		Week4 24/11/25 Week5	k4 edu 1/25 Jo	To identify 3d shapes from 2d representations from cubes and other cuboids. To estimate and compare acute, obtuse and reflex angles and know that angles are measured in degrees. To deduce missing angles along a straight line. To distinguish between regular and irregular polygons. To measure lines accurately with a ruler to the nearest mm and measure angles with a protractor to the nearest degree.		Week 3 19/01/26	Multiplication and Division	number up to 19. To recognise and use squared and cube numbers. To accurately record remainders in different ways (remainders, fractions, decimals or rounding). To solve multiplication missing number problems. To use inverse operation, rounding and estimation to support calculations. To solve problems including units of measure, area and perimeter. To solve problems including scaling by simple fractions.				
29/10/25	¥	To use estimation to solve addition and subtraction calculations. Count fluently in 8s			ometry: Properties	To identify angles at a point and one whole turn, angles at a point and a straight line and half a turn. To identify parallel lines and right angles using conventional markings.		Week 4	Multiplicatio	To subtract whole numbers and decimal numbers mentally.			
Week 6 06/10/25		To identify multiples and factors of a number. To find factor pairs of a number (including common factors). To multiply numbers up to 4 digits by a 1-digit number using a formal written method (see calculation policy). To multiply numbers up to 4 digits by a 2-digit number using long multiplication (see calculation policy). To multiply a 2-digit by a 2-digit number (links to finding the area). To divide numbers up to 4 digits by 1 digit using a formal method (see calculation policy). To divide numbers up to 4 digits by 1 digit using a formal method including remainders (see calculation policy). To multiply multiply and divide whole numbers and decimals by 10, 100 and 1000. To draw upon multiplication factors to multiply and divide decimals (e.g. 0.7 x 8). To multiply and divide decimals. Count fluently in 9s	w os,	01/12/25 Week 6 08/12/25	asure G	To add decimals with 1dp mentally. To accurately convert between unit of measure (km and m; cm and m; cm and mm; g and kg; l and ml) To measure and calculate the perimeter of composite rectilinear shapes in cm and m. To calculate the area of composite shapes (made up of rectangles and squares – using standard units cm2 and m2). To estimate the area of irregular shapes. To calculate the perimeter of rectangles and composite shapes including shapes with missing measurements. To add and subtract decimals with 1dp mentally.	v	26/01/26					
Week 7 13/10/25	Multiplication & Division							Wee k 5 02 /0 2/2 6	Ire	To convert unit of time. To calculate and convert units of time with timetables. To convert between amounts of money to solve problems. To understand and use approximate equivalences between metric units and common imperial units such as; inches, pounds and pints. To use all four operations to solve problems involving measure using decimal notation (including scaling). To estimate volume (e.g. using 1cm cubed blocks to build cuboids including cubes) To subtract whole numbers and decimal numbers mentally.			
					្ន	To accurately use scales to interpret data on graphs. To solve comparison, sum and difference problems using information presented in a line graph. To read and interpret timetables.			Measure				
Week8 20/10/24 3-day week	Co-ordinates	To read and plot co-ordinates in the first quadrant. To recognise and use reflection to reflect shapes within a quadrant. To translate shapes accurately within the first quadrant. To read and plot co-ordinates up to a 2-quadrant grid. Count fluently in 6s		Week 7 15/12/25	Statistics	To decide which representations of data are most appropriate and why. To add and subtract decimals with 1dp mentally.		Week 6 09/02/26					
	October Half Term			Christmas End of Term				February Half Term					



HCAT Maths Year on a Page Year 5 - 2025/2026



Spring Term 2				Summer Term 1				Summer Term 2			
Week 1 23/02/26	Fractions, Decimals and Percentages	To multiply proper fractions by whole numbers and convert these into a mixed number fraction. To multiply improper fractions by whole numbers and convert these into a mixed number fraction. To add and subtract fractions including improper and mixed number fractions. To recognise mixed number and improper fractions and convert between one another. To simplify more complex improper fractions into mixed number fractions using division.		Week 1 13/04/26	Measures	To solve problems involving time and money including conversions (days to weeks expressing the answer as weeks and days). To understand and use approximate equivalences between metric units and common imperial units such as; inches, pounds and pints. To solve area and perimeter problems using the 4 operations — including missing numbers. To multiply decimal numbers by 10, 100 and 1000.		Week 1 01/06/26	To apply subtraction knowledge to find differences in		
	oX	To recall square numbers. To accurately plot coordinates across two quadrants. To use coordinates to describe and represent the position of a shape		Week 2 20/04/26	Addition & Subtraction	To use formal written method to add more than two numbers together including decimals. To use formal written method to subtract more than two numbers from one another including decimals. To solve addition and subtraction multi-step problems in context, deciding which operation and method to use and justify why. To compare calculation using <> = symbols. To divide decimal numbers by 10, 100 and 1000.		Week 2 08/06/26	Summer Assessment Week		
Week 2 02/03/26	netry: Position { direction	following a reflection. To use translation to translate shapes accurately across two quadrants. To each training a coordinates accordinates accordinates to describe and represent the position of a shape following a reflection.						Week 3 15/06/26	To use multiplication and division strategies to find missing numbers in a sequence and solve related problems. To solve multistep problems including multiplication and division - with measure including converting to find totals.		
	Geomet	To plot given coordinates across four quadrants. To recall cube numbers.		Week 3 27/04/26 Week 4 04/05/26 4 day week	Multiplication & Division	To solve problems including scaling by simple fractions. To solve problems involving prime and composite numbers. To multiply and divide whole numbers by 10, 100, 1000 in context. To investigate and solve problems involving squared and cubed numbers. To divide numbers up to four digits by a 1-digit number (see calculation policy). To divide numbers up to four digits by a two-digit number using long division (see calculation policy) To use the equals sign to indicate equivalence including missing number problems. To use prime, squared and cubed numbers to construct equivalence statements. [for example:4 x 35 = 2 x 2 x 35; 3 x 270 = 3 x 3 x 9 x 10 = 9² x 10]. To confidently recall prime, squared and cube numbers.					
Week 3 09/03/26	ry; Properties of shape	To draw given angles and measure them in degrees. To accurately estimate the size of angles. To calculate missing angles within shapes. To apply knowledge of angles to distinguish between regular and irregular polygons. To recall prime numbers up to 19.						Week 4 22/06/26			
	Geomet							Week 5 29/06/26 Week 6 06/07/26	To use knowledge of equivalence to solve problems in the context of measure. To convert between improper fractions and mixed number and find equivalence fractions to help solve problems. To solve problems involving comparison, ordering and calculation in a		
Week4	Measures	To compare metric and common imperial units of measure (inches, pounds, and pints). To calculate the perimeter of rectangles and composite shapes including shapes with missing measurements. To find the volume of a cube/cuboid – including whole and decimal numbers.							variety of real-world contexts.		
16/03/26	Mea	To solve missing measures problems involving representing answers algebraically [for example: 4 + 2B = 20 for a rectangle of sides 2cm and Bcm and perimeter of 20cm].		Week 5 11/05/26	Fractions, Decimals and Percentages	To solve problems which require knowing common percentage and decimal equivalents (half, quarter, fifth, two fifths or four fifths and those fractions with a denominator of a multiple of 10 or 25). To calculate a fraction of an amount including scaling. To add and subtract decimals including whole numbers and decimals, decimals with different numbers of decimal places and complements of one (numbers that add together to make one). To calculate a percentage of an amount (wider than common multiples). To solve complex problems involving fractions, decimals and percentages. To confidently recall prime, squared and cube numbers.			bo .		
		To multiply whole numbers by 10, 100 and 1000. To read and interpret tables including timetables. To solve problems linked with a range of tables including timetables. To interpret data and draw a line graph. To divide whole numbers by 10, 100 and 1,000 – ensuring the answer							Use of trackers and QLA and teacher assessment of pupils within your class to address gaps in learning. Relevant learning objectives need to be taken from this document depending on what your pupils need and used each lesson. Use of time to ensure that pupils have the fundamentals for the next academic year.		
Week 5 23/03/26	Statistics	turns into a decimal number.		Week 6 18/05/26				Week7 13/07/26	an in the state of		
	Easter End of Term			Spring Bank Half Term				Summer Holidays End of Term			



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Place Value



National Curriculum Objectives:

Pupils should be taught to:

- Read, write, order and compare numbers up to 1,000,000
- Count forwards and backwards in 10 and powers of 10 from any number up to 1 million
- Interpret negative numbers in context, counting forwards and backwards with positive and negative numbers.
- Round any number up to 1,000,000 to 10,10,1000, 10th and 100th
- Read roman numerals to 1000 (m) and recognise years in numerals

Misconceptions:

- Identifying the value of number through location of the decimal.
- Rounding by looking at wrong values.
- Rounding by looking at wrong values.
- Difference when involving negative numbers than the difference is a size of a gap
- Roman numerals: Identifying that there are only certain cases where subtractive principles work e.g. DCCCC= 900 (wrong) M=900 (correct)

Mathematical Language:

Equal, equation, order, greater than, less than, value, digit, partition, hundredths, tenths, thousandths, round.

Development steps:

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- Read and write numbers from decimals to millions.
- Identify the value of any digit within a number.
- Order and compare numbers of different values and constructs up to 1,00,000 (e.g. 10.756, 657.10)
- Round any whole number up to 1,000,000 including numbers up to 3 decimal places.
- Interpret negative numbers and compare the value of these.
- Read and write roman numerals from I up to M including the teaching of the subtractive principle to calculate values.

Other links:

- Addition and subtraction
- Multiply and divide by 10, 100, 1000, 10,000, 100,000
- Converting between metric units of measure
- Mental strategies for multiplying and dividing by 10, 100, 1000
- Alignment of place value for column methods
- Using rounding to estimate and check whole numbers

Contexts/resources:

- Temperatures
- Money- Rounding cheques up to millions including decimals
- Space- ordering distances



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Addition & Subtraction



National Curriculum Objectives:

- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- Add and subtract numbers mentally with increasingly large numbers
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Misconceptions:

1163 Place value positioning +12123

- Sometimes teachers may say to use a '0' as a place holder, however it is essential the place holder goes to the left otherwise it changes the value of the number.
- Using formal written methods when mental methods are more efficient.

Mathematical Language:

Inverse, sum, total, more than, increased by, both, decreased by, how much/many more, how much/many less, minus, difference, reduce, exchange, change (money), column, place holder, place value, thousands, hundreds, tens, ones, tenths, hundredths.

Development steps:

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- Add whole numbers with more than 4 digits (column method)
- Subtract whole numbers with more than 4 digits
- Add and subtract more than 2 numbers, with varied place value
- Round to estimate and approximate.
- Inverse operations, including missing numbers and digits
- Multistep addition and subtraction problems
- Multistep addition and subtraction problems with x and ÷
- Able to justify which method to use.
- Choose appropriate and efficient methods of addition and subtraction.
- Develop mental strategies for addition and subtraction of larger numbers and decimals to 2dp.

Other links:

Place value links e.g. What is the total of 1000 + 400 + 30 + 2 and 7 thousands, 4 hundreds and 3 tens.

Adding and Subtracting decimals and decimals and whole numbers together: e.g. through money amounts and measures.

- Apply knowledge of converting measures (Kg/g, L/ml, Km/m/cm/mm)
 e.g. to add and subtract 1.4Kg + 2250g
- Statistics link how many more/less
- Perimeter and length
- Links to algebra (symbols representing numbers)
- Balancing equations e.g. 3470 = 1245 + _____ or ____ + 457 = 120 +
- Geometry perimeter of shapes and quadrilaterals
- Angles subtracting from right angle/180
- Addition and subtraction within calendar
- Addition and subtraction of Roman numerals
- Addition and subtraction of time (mins, hours etc.).

Contexts/resources:

Money

Menus

Shopping

Cooking/baking (measures link)

Building (perimeter)

Use of children's interests.

Space, population, distance (large numbers)

Rainfall – decimals – statistics

NCTEM tasks and activities

https://www.ncetm.org.uk/public/files/23305628/Mastery_Assessment_Y5 _High_Res.pdf

NRICH

https://nrich.maths.org/content/id/13291/KS2CurriculumLinkedtoNRICH.pdf

White Rose Materials

https://whiterosemaths.com/resources/schemes-of-learning/primary-sols/



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Multiplication & Division



National Curriculum Objectives:

Pupils should be taught to:

- Identify multiples and factors, including finding all factor pairs
- Solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- Establish whether a number up to 100 is prime and recall prime numbers up to 19
- Multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers
- Multiply and divide numbers mentally drawing upon known facts
- Divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context
- Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

Misconceptions:

- Multiplying and dividing inverses aren't always the opposite operation: $(10 \times 2 = 5 \text{ becomes } 10 \div 5 = 2) \text{ inverse } (10 \div ? = 2/10 \div 2 = 5) \text{ not } 10 \times 2 = 20$
- Multiplying fractions you are creating a smaller fraction

Mathematical Language:

Multiplied, per, triple, squared, split, average, shared, volume area, product, indices, factor, divide, average.

<u>Development steps:</u>

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- Multiples, factors, LCM & HCM, factor pairs
- Recite and identify prime numbers 1-100
- Recall and apply multiplication facts to 12x12
- Use written methods to accurately multiply 4 x ½ digits accurately
- Use multiplication facts to multiply and divide numbers mentally
- Divide numbers 4 by 1 digit and display remainders appropriately: as a fraction or decimal not a r.
- Mentally multiply and divide by 10,100,1000
- Area and volume can be calculated accurately with answered displayed as squared or cubed
- Understand that 5₂ means 5x5 and 5₃ means 5x5x5
- Adopt timetables facts to solve larger problems: 3x9=21 30x90 = 2100
- Multiply decimals up to 2 dp using written methods

Other links:

- Explain the equals sign and balance equations using inverse: ? x 12 = 60
 x 2
- Algebra
- Multiplying and dividing fractions
- Mean/average

Contexts/resources:

- Purchasing amounts: Gardening, Building, Food menus (decimals)
- Area of shapes/rooms in a house
- Total holiday costs being divided among pee person
- Evens planning with a budget
- Distance travelled, miles per gallon, cost of fuel



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Fractions, Decimals and Percentages



National Curriculum Objectives:

- Compare and order fractions whose denominators are all multiples of the same number
- Recognise mixed numbers and improper fractions and convert from one form to the other
- Add and subtract fractions with the same denominator and related fractions; write mathematical statements >1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 11/5)
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Read and write decimal numbers as fractions (e.g. 0.71 = 71/100)
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Round decimals with two decimal places to the nearest whole
- Number and to one decimal place
- Read, write, order and compare numbers with up to three decimal places
- Solve problems involving number up to three decimal places.

Misconceptions:

- · Adding fractions without finding common denominator.
- Multiplying to find a common denominator but not finding the new numerator.
- Converting decimals to fractions/%
- 0.01= 1/10 = 1% not 10% 10/100 0.001 = 0.1%
- 1/x10,100,1000 not adding/taking the 0

Mathematical Language:

Improper/top heavy Simplify Percentage

Numerator Denominator

Common factors

Equivalent fraction

Multiply

Denominator Equivalent

places

Development steps:

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- What is a fraction? Concepts & concrete understanding, a fraction is a part of a whole.
- Identify, name and write equivalent fractions of a given fraction, represented visually in 10ths/100's
- Convert between improper and mixed number fractions from one to the other
- Use understanding of denominator to add and subtract fractions with different denominators
- Multiply and divide both proper and improper fractions
- Use place value to read and write decimals & %; e.g. 0.71 = 71/100
- Rounding decimals with 2 decimal places to the nearest whole number and to 1 decimal place.
- Compare numbers up to 3 decimal places & turn these into fractions
- Recognise % as part of 100 and write %'s as decimals and fractions.
- Compare fractions, % and decimals accurately
- Fractions of amounts
- %'s of amounts
- Simplifying fractions based on common factors.

Other links:

- Measures
- Scaling
- Number line ordering positions
- Comparison of FDP
- Area and perimeter: half a length then an area will 1/2

Contexts/resources:

• Shopping: discounts, % of amount, ½ off etc.



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Geometry



National Curriculum Objectives:

- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.
- Pupils recognise and use reflection and translation in a variety of diagrams, including continuing to use a 2-D grid and coordinates in the first quadrant. Reflection should be in lines that are parallel to the axes identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
- Draw given angles, and measure them in degrees (o) identify: angles at a point and one whole turn (total 360o)
- Other multiples of 900 use the properties of rectangles to deduce related facts and find missing lengths and angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Misconceptions:

- Not know which is the x and y axis
- Translate shapes rather than reflect them
- Know the difference between perpendicular and parallel
- Mix types of angles up
- Use the wrong scale on a protractor

Mathematical Language:

Translation, reflection, perpendicular, parallel, angles, obtuse, acute, reflex, straight line, full turn, degrees.

<u>Development steps:</u>

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- Understand that the first number represents the x coordinate and the y coordinate represents the second
- Reflect objects using lines that are parallel to the axes in the first quadrant
- Explore what happens to the points when they are reflected in lines parallel to the axes
- Translate shapes on a grid
- Describe translations of coordinates
- Recognise a full turn is 360 degrees, half a turn is 180 degrees and a quarter of a turn is 90 degrees. (Link to compass directions)
- Deduce angles such as 45, 135 and 270 degrees.
- Introduce reflex angles
- Use a protractor (develop understanding of using both inside and outside scales on the protractor) – measure angles less than 90 degree, acute angles
- Use of protractor to measure obtuse angles estimate angles alongside measuring
- Draw lines correctly to the nearest mm to help them draw angles of given size. (Continue to develop estimation skills whilst drawing and measuring lines and angles)
- Recognise that two right angles are equivalent to a straight line, or a straight line is half a turn.
- Know that there are 360 degrees in a full turn
- Identify right angles in shapes (squares and rectangles)
- Understand perpendicular and parallel lines
- Distinguish between regular and irregular polygons.
- Identify 3D shapes, including cubes and cuboids from 2D nets
- Know what faces, curved surfaces, vertices and edges etc.

Other links:

- Estimating
- Rounding numbers
- 2D and 3D shapes
- Measuring
- Coordinates

Contexts/resources:

• Math Hub https://whiterosemaths.com/resources/schemes-of-learning/primary-sols/



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Measures



National Curriculum Objectives:

- Convert between different units of metric measure (for example, kilometre and metre.
- Centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- Understand and use approximate equivalences between metric units and common
- Imperial units such as inches, pounds and pints
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes
- Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes) and capacity [for example, using water]
- Solve problems involving converting between units of time
- Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including

Misconceptions:

- Not understanding the conversion of measures
- Misunderstanding x10 x100 x1000
- Place value when multiplying
- Not knowing the difference between metric and imperial units
- Misunderstanding of time
- Knowing the difference between irregular and regular shapes
- Knowing the difference between capacity and volume

Mathematical Language:

Units, metric, km, m, cm, c, mm, g, kg, l, ml, equivalent, imperial units, inches, pounds, pints, perimeter, areas, rectangle, time, scaling.

Development steps:

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- Focus on 'kilo' in units of length and mass, meaning a thousand.
- Convert from M to KM, G to KG and vise versa
- Use of milli- in units of length and mass. (milli means 1/1000)
- Convert from m to mm, I to mI and vice versa
- Choose appropriate unit for measure
- Introduced to imperial units of measure metric units and common imperial units such as inches, pounds (lbs.) and pints
- Convert between different units of times including years, months, weeks, days, hours, minutes and seconds – use of time lines, calendars, clocks
- Use timetables to retrieve information and solve problems
- Measure perimeter of rectilinear shapes from diagrams without grids.
- Finding perimeters with unknown lengths
- Counting squares to find area and then use the formula to calculate
- Calculate the area of compound shapes
- Estimate the area of irregular shapes
- Understand the volume is the amount of solid space something takes up
- Understand that volume is different to capacity (capacity is related to the amount a container can hold)
- Use volume to compare and order different solids
- Estimate volume of different solids and objects
- Estimate capacity
- Know parts of a circle
- Use Pi to find the area of a circle

Other links:

- Estimation
- Place Value
- X10 100 1000
- Dividing by 10 100 1000
- Multiplication
- Addition and Subtraction
- Missing values 4cm + = 11cm

Contexts/resources:

• Math's Hub https://whiterosemaths.com/resources/schemes-of-learning/primary-sols/



HCAT Maths Year on a Page Year 5 – Curriculum Guide – Statistics



National Curriculum Objectives:

- Solve comparison, sum and difference problems using information presented in a line graph
- Complete, read and interpret information in tables, including timetables.
- Pupils connect their work on coordinates and scales to their interpretation of time graphs.
- They begin to decide which representations of data are most appropriate and why.

Misconceptions:

- Understanding how to read a line graph
- Misunderstanding when reading time tables
- Different scales for graphs

Mathematical Language:

Comparison, line graph, interpret information, coordinates, scales, time graph, representations, data, public transport tables, graphs.

Development steps:

NOTE: these steps are not necessarily listed in order, nor are they the focus for a whole lesson in some cases. They are listed to support elements that need to be explored at some point.

- Read and interpret line graphs and answer questions relating to the graphs
- Use knowledge of scales to read information accurately
- Use data in real life contexts
- Use knowledge of scales and coordinates to represent data as a line graph
- Extract information from tables and apply previously learnt skills
- Read a range of two way tables and interpret them by answering
 questions
- Extract information from timetables (real life public transport timetables)

Other links:

- Addition and subtraction
- Real life context

Contexts/resources:

• Math's Hub https://whiterosemaths.com/resources/schemes-of-learning/primary-sols/