

Maths

Curriculum

Maths Overview

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Autumn** | | **Spring** | | **Summer** | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Year 3** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ... | **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ...  cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division** | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **Money**  Coins Coin Uk Transparent & PNG Clipart Free Download - YWD  **Statistics**  Clipart Statistics Chart | **Length and Perimeter**  Measuring Tape Clip Art at Clker.com - vector clip art online ...  **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ... | **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...  **Time**  Time clock Timer , Cartoon alarm clock PNG clipart | free cliparts ... | **Properties of shape**  Area Clipart | Clipart Panda - Free Clipart Images  Free Capacity Cliparts, Download Free Clip Art, Free Clip Art on ...**Mass and Capacity** |
| **Year 4** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ... | **Length and Perimeter**  Measuring Tape Clip Art at Clker.com - vector clip art online ...  cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division** | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **Area**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\389D9903.tmp** | **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...  **Decimals**  Decimal Numbers Clipart - Clip Art Library | **Decimals**  Decimal Numbers Clipart - Clip Art Library  **Money**  Coins Coin Uk Transparent & PNG Clipart Free Download - YWD  Time clock Timer , Cartoon alarm clock PNG clipart | free cliparts ...**Time** | **Statistics**  Clipart Statistics Chart  **Properties of Shape/Position and direction**  Area Clipart | Clipart Panda - Free Clipart Images |
| **Year 5** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ...  **Statistics**  Clipart Statistics Chart | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\389D9903.tmpPerimeter and Area** | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ... | Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...**Fractions**  **Decimals and Percentages**  Fircroft: Fractions, Decimals & Percentages | **Decimals**  Decimal Numbers Clipart - Clip Art Library  **Properties of shape/Position and Direction**  Area Clipart | Clipart Panda - Free Clipart Images | **Converting units of measure**  Scale Clipart Apple - Weight Weighing Scale Scale Clipart, HD Png ...  **Volume**  Shapes Clipart Cube - Volume Cubes - Png Download (#3289771 ... |
| **Year**  **6** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition, Subtraction, Multiplication and Division**  Skip Counting Songs for Multiplication and Division Facts | Math ... | **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...  **Position and Direction**  Royalty-free Direction, Position, Or Indication Sign - Wooden ... | **Decimals and Percentages**  Fircroft: Fractions, Decimals & Percentages  **Algebra**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\3DBE922.tmp** | **Converting units of measure**  Scale Clipart Apple - Weight Weighing Scale Scale Clipart, HD Png ...  **Perimeter, Area and Volume**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\389D9903.tmp**  View Ratio Clip Art at Clker.com - vector clip art online, royalty ...**Ratio** | **Properties of shape**  Area Clipart | Clipart Panda - Free Clipart Images  **Problem Solving**  Wonder Problem Solving Transparent & PNG Clipart Free Download - YWD | **Statistics**  Clipart Statistics Chart  **Investigations**  Private Investigator Clipart - Clip Art Library |

Year 3

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Autumn** | | **Spring** | | **Summer** | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Overview** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ... | **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ...  cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division** | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **Money**  Coins Coin Uk Transparent & PNG Clipart Free Download - YWD  **Statistics**  Clipart Statistics Chart | **Length and Perimeter**  Measuring Tape Clip Art at Clker.com - vector clip art online ...  **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ... | **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...  **Time**  Time clock Timer , Cartoon alarm clock PNG clipart | free cliparts ... | **Properties of shape**  Area Clipart | Clipart Panda - Free Clipart Images  Free Capacity Cliparts, Download Free Clip Art, Free Clip Art on ...**Mass and Capacity** |
| **Suggested Content/Material** | The National Curriculum Handbook for Secondary Teachers in England ...White Rose Maths - Trent Valley Teaching School AllianceNRICH Website ReviewNational Centre for Excellence in the Teaching of Mathematics - NCETMThird Space Learning - Maths Intervention Programmes  C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7700841C.tmp | | | | | |

|  |  |  |
| --- | --- | --- |
| KPIs | | |
| Autumn | Spring | Summer |
| *3.1.1 Identify, represent and estimate numbers using different representations*  *3.1.2 Find 10 or 100 more or less than a given number.*  *3.1.3 Recognise the place value of each digit in a 3 digit number*  *3.1.4 Compare and order numbers up to 1000*  *3.1.5 Read and write numbers to 1,000 in numerals and words*  *3.1.6 Solve number problems and practical problems involving the above ideas*  *3.1.8 Count from 0 in multiples of 50 and 100.*  *3.1.9 Add and subtract numbers mentally, including 3 digit numbers & ones (365+5)*  *3.1.10 Add and subtract numbers mentally, including 3-digit numbers & tens (365+10)*  *3.1.11 Add and subtract numbers mentally, including 3-digit numbers & hundreds (365 +432)*  *3.1.12 Add numbers with up to 3 digits, using formal written methods of columnar addition.*  *3.1.13 Subtract numbers with up to 3 digit, using formal written methods of columnar subtraction.*  *3.1.14 Estimate the answer to a calculation and use the inverse operations to check answers.*  *3.1.15 Solve problems including missing number problems, place value and more complex addition and subtraction.*  *3.1.16 Recall and use the multiplication and division facts for the 3, 4 and 8 tables.* | *3.1.17 Write and calculate mathematical statements for multiplication using known multiplication tables, including 2-digit x 1-digit, using mental and progressing to formal written methods.*  *3.1.18 Write and calculate mathematical statements for multiplication and division using known multiplication tables, including use of money and length*  *3.1.19 Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.*  *3.2.1 Add and subtract amounts of money to give change using both £ and p in practical contexts.*  *3.4.1 Interpret and present data using bar charts*  *3.4.2 Interpret and present data using pictograms*  *3.4.3 Interpret and present data using tables*  *3.4.4 Read and present information from a bar chart that has a scale on the vertical axis*  *3.4.5 Solve 1-step and 2-step questions such as ‘How many more?’ and ‘How many fewer?’ using information presented in scaled bar charts pictograms and other graphs*  *3.2.2 Measure, compare, add & subtract lengths (m/cm/mm)*  *3.1.27 Add and subtract measures (length, weight and volume) with up to 3 digits, using formal written methods of columnar addition and subtraction.*  *3.2.5 Measure the perimeter of simple 2D shapes.*  *.1.20 Count up and down in tenths; recognise that tenths arise from dividing an object into ten equal parts and in dividing numbers or quantities by 10.*  *3.1.21 Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.*  *3.1.22 Recognise, find and write fractions of a discrete set of objects: unit fractions & non-unit fractions with small denominators* | *3.1.23 Recognise and show, using diagrams, equivalent fractions with small denominators.*  *3.1.24 Compare and order unit fractions, and fractions with the same denominators.*  *3.1.25 Add and subtract fractions with the same denominator within one whole.*  *3.1.26 Solve problems that involve all of the fraction objectives above.*  *3.2.6 Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12 and 24 hour clocks*  *3.2.7 Estimate and read time with increasing accuracy to the nearest minute;*  *3.2.8 Record and compare time in terms of seconds, minutes, hours.*  *3.2.9 Use vocabulary such as o’clock, am/pm, morning, afternoon, noon and midnight.*  *3.2.10 Know the numbers of seconds in a minute and the number of days in each month, year and leap year.*  *3.2.11 Compare durations of events, for example to calculate time taken by particular events or tasks.*  *3.3.1 Recognise angles are a property of shape or a description of a turn.*  *3.3.2 Identify right angles; recognise that two right angles make a half-turn, three make three quarters & four a complete turn*  *3.3.3 Identify whether angles are greater than or less than a right angle*  *3.3.4 Identify horizontal and vertical lines and pairs of perpendicular & parallel lines.*  *3.3.5 Draw 2D shapes*  *3.3.6 Make 3D shapes using modelling materials*  *3.3.7 Recognise 3D shapes in different orientations; & describe them*  *3.2.3 Measure, compare, add & subtract mass (kg/g)*  *3.2.4 Measure, compare, add & subtract volume/ capacity (l/ml).* |

Year 4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Autumn** | | **Spring** | | **Summer** | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Overview** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ... | **Length and Perimeter**  Measuring Tape Clip Art at Clker.com - vector clip art online ...  cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division** | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **Area**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\389D9903.tmp** | **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...  **Decimals**  Decimal Numbers Clipart - Clip Art Library | **Decimals**  Decimal Numbers Clipart - Clip Art Library  **Money**  Coins Coin Uk Transparent & PNG Clipart Free Download - YWD  Time clock Timer , Cartoon alarm clock PNG clipart | free cliparts ...**Time** | **Statistics**  Clipart Statistics Chart  **Properties of Shape/Position and direction**  Area Clipart | Clipart Panda - Free Clipart Images |
| **Suggested Content** | The National Curriculum Handbook for Secondary Teachers in England ...White Rose Maths - Trent Valley Teaching School AllianceNRICH Website ReviewNational Centre for Excellence in the Teaching of Mathematics - NCETMThird Space Learning - Maths Intervention ProgrammesC:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7700841C.tmp | | | | | |

|  |  |  |
| --- | --- | --- |
| **KPIs** | | |
| **Autumn** | **Spring** | **Summer** |
| *4.1.1 Count in multiples of 6, 7, 9, 25 and 1000*  *4.1.2 Count in multiples of 25 and 1000*  *4.1.3 Find 1000 more or less than a given number*  *4.1.4 Recognise the place value of each digit in a four digit number*  *4.1.5 Compare and order numbers beyond 1000*  *4.1.6 Identify, represent and estimate numbers using different representations*  *4.1.7 Round any number to the nearest 10, 100 or 1000*  *4.1.8 Solve number and practical problems that involve all of the above with increasingly large positive numbers*  *4.1.9 Count backwards through zero to include negative numbers*  *4.1.10 Read Roman numerals to 100 and understand that over time, the numeral system changes to include the concept of zero and place value*  *4.1.11 Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction, where appropriate*  *4.1.12 Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction, where appropriate*  *4.1.13 Estimate and use inverse operations to check answers to a calculation*  *4.1.14 Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why*  *4.2.1 Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m*  *4.2.2 Convert between different units of measure (e.g. km to m; hr to min)*  *4.1.15 Recall multiplication and division facts for tables up to 12x12*  *4.1.16 Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; multiplying three numbers together* | *4.1.15 Recall multiplication and division facts for tables up to 12x12*  *4.1.16 Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; multiplying three numbers together*  *4.1.17 Solve problems involving multiplying and adding, using the distributive law to multiply two digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects*  *4.1.18 Recognise and use factor pairs and commutativity in mental calculations*  *4.1.19 Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout*  *4.1.20 Divide 2-digit and 3-digit numbers by a 1-digit number using formal written layout with no remainder*  *4.2.3 Find the area of rectilinear shapes by counting squares*  *4.1.21 Recognise and show, using diagrams, families of common equivalent fractions*  *4.1.22 Count up and down in hundredths; recognise that hundredths arise from dividing an object into 100 equal parts and in dividing numbers or quantities by 100*  *4.1.23 Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities including non-unit fractions where the answer is a whole number*  *4.1.24 Add and subtract fractions with the same denominator*  *4.1.25 Recognise and write decimals equivalents of any number of tenths or hundredths*  *4.1.26 Find the effect of dividing a 1-digit or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths*  *4.1.31 Find the effect of multiplying a number with up to 2 decimal places by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths*  *4.1.32 Find the effect of dividing a number with up to 2 decimal places by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths* | *4.1.27 Solve simple measure and money problems involving fractions and decimals to 2 decimal places*  *4.1.28 Compare numbers with the same number of decimal places up to two decimal places*  *4.1.29 Round decimals with one decimal place to the nearest whole number*  *4.1.30 Recognise and write decimal equivalents to ¼, ½ and ¾*  *4.2.4 Estimate, compare and calculate different measures including in pounds and pence*  *4.2.5 Solve simple measure and money problems involving fractions and decimals to 2 decimal places*  *4.2.6 Read, write & convert time between analogue and digital 12- and 24-hour clocks*  *4.2.7 Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days*  *4.4.1 Interpret and present discrete and continuous data using appropriate graphical methods, including: -bar charts -time graphs*  *4.4.2 Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs*  *4.3.1 Identify acute and obtuse angles and compare and order angles up to two right angles by size*  *4.3.2 Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes*  *4.3.3 Identify lines of symmetry in 2D shapes presented in different orientations*  *4.3.4 Complete a simple symmetric figure with respect to a specific line of symmetry*  *4.3.5 Describe positions on a 2D grid as coordinates in the first quadrant*  *4.3.6 Plot specified points and draw sides to complete given polygon*  *4.3.7 Describe movements between positions as translations of a given unit to the left/right and up/down* |

Year 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Autumn** | | **Spring** | | **Summer** | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Overview** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition and Subtraction**  Addition clipart addition subtraction, Addition addition ...  **Statistics**  Clipart Statistics Chart | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\389D9903.tmpPerimeter and Area** | cole : r?�f?�rences: Multiplication et division : remarques sur ...**Multiplication and Division**  **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ... | Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...**Fractions**  **Decimals and Percentages**  Fircroft: Fractions, Decimals & Percentages | **Decimals**  Decimal Numbers Clipart - Clip Art Library  **Properties of shape/Position and Direction**  Area Clipart | Clipart Panda - Free Clipart Images | **Converting units of measure**  Scale Clipart Apple - Weight Weighing Scale Scale Clipart, HD Png ...  **Volume**  Shapes Clipart Cube - Volume Cubes - Png Download (#3289771 ... |
| **Suggested Content** | The National Curriculum Handbook for Secondary Teachers in England ...White Rose Maths - Trent Valley Teaching School AllianceNRICH Website ReviewNational Centre for Excellence in the Teaching of Mathematics - NCETMThird Space Learning - Maths Intervention ProgrammesC:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7700841C.tmp | | | | | |

|  |  |  |
| --- | --- | --- |
| **KPIs** | | |
| **Autumn** | **Spring** | **Summer** |
| *5.1.1 Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit*  *5.1.2 Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000*  *5.1.3 Interpret negative numbers in context, count forwards and backwards with positive and negative numbers including through zero*  *5.1.4 Round any number up to 1,000,000 to the nearest 10, 100, and 1000*  *5.1.5 Round any number up to 1,000,000 to the nearest 10000 or 100000*  *5.1.6 Solve number problems and practical problems that involve all of the above*  *5.1.7 Read Roman numerals to 1000 and recognise years written in Roman numerals*  *5.1.12 Add whole numbers with more than 4 digits including using formal written methods (columnar addition)*  *5.1.13 Subtract whole numbers with more than 4 digits including using formal written methods (columnar subtraction)*  *5.1.14 Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy*  *5.1.15 Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why*  *5.4.1 Solve comparison, addition and difference problems using information presented in a line graph*  *5.4.2 Complete, read and interpret information in tables, including timetables*  *5.4.3 Know how to construct a table from a set of given information*  *5.4.4 Know how to construct a table using only the relevant information*  *5.4.5 Construct own table and timetable making decision about labelling*  *5.1.15 Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why*  *5.1.16 Multiply and divide numbers mentally drawing upon known facts. (12x12)*  *5.1.17 Multiply whole numbers and those involving decimals by 10, 100 and 1000*  *5.1.18 Divide whole numbers and those involving decimals by 10, 100 and 1000*  *5.1.19 Identify multiples and factors including finding all factor pairs of a number and common factors of two numbers up to 100*  *5.1.20 Recognise and use square numbers and cube numbers, and the notation for square2 and cubed3*  *5.1.21 Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes*  *5.1.22 Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers*  *5.1.23 Establish whether a number up to 100 is prime and recall prime numbers up to 19*  *5.2.1 Measure and calculate the perimeter of composite rectilinear shapes in cm and m*  *5.2.2 Calculate & compare the area of rectangles (including squares, & including using standard units, square centimetres (cm2) and square metres (m2)*  *5.2.3 Estimate the area of irregular shapes*  *5.2.4 Calculate & compare the area of rectangles (including squares) including using standard units, square centimetres (cm2) and square metres (m2) & estimate the area of irregular shapes* | *5.1.24 Multiply numbers up to 4-digits by a 1-digit using formal written methods*  *5.1.25 Multiply 2-digit number using a formal written method, including long multiplication for 2-digit numbers*  *5.1.26 Divide numbers up to 4-digits by a 1-digit number using the formal written method of short division*  *5.1.27 Interpret remainders appropriately for the context*  *5.1.28 Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign*  *5.1.29 Compare and order fractions whose denominators are all multiples of the same number*  *5.1.30 Convert fractions with different denominators to have a common denominator*  *5.1.31 Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths*  *5.1.32 Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements*  *5.1.33 Add and subtract fractions with the same denominator and denominators that are multiples of the same number*  *5.1.34 Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams*  *.1.35 Read and write decimal numbers as fractions, e.g. 0.71 = 71/100*  *5.1.36 Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates*  *5.1.37 Read, write, order and compare numbers with up to three decimal places*  *5.1.38 Count up and down in thousandths; recognise that thousandths arise from dividing an object into 1000 equal parts and in dividing numbers or quantities by 1000*  *5.1.39 Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents*  *5.1.40 Round decimals with two decimal places to the nearest whole number and to one decimal place*  *5.1.41 Solve problems involving number up to three decimal places*  *5.1.42 Recognise the percent symbol (%) and understand that per cent relates to ‘number of parts per hundred’ and write percentages as a fraction with denominator 100, and as a decimal*  *5.1.43 Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25* | *5.1.44 Use all four operations to solve problems involving measure (length, mass, volume, money) using decimal notation, including scaling*  *5.3.4 Know angles are measured in degrees; estimate & compare acute, obtuse & reflex angles*  *5.3.5 Draw given angles & measure them in degrees*  *5.3.6 Identify angles at a point on a straight line & ½ a turn (total 180°)*  *5.3.7 Identify angles at a point & one whole turn (total 360°)*  *5.3.8 Identify other multiples of 90°*  *5.3.1 Identify 3D shapes, including cubes and other cuboids, from 2D representations*  *5.3.2 Use the properties of rectangles to deduce related facts & find missing lengths & angles*  *5.3.3 Distinguish between regular and irregular polygons based on reasoning about equal sides and angles*  *.2.5 Convert between different units of metric measure (e.g. km/m; cm/m; cm/mm; g/kg; l/ml)*  *5.2.6 Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints*  *5.2.7 Solve problems involving converting between units of time*  *5.2.8 Estimate volume (e.g. using 1 cm3 blocks to build cubes, including cuboids) & capacity (e.g. using water)*  *5.2.9 Use all four operations to solve problems involving measure* |

Year 6

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Autumn** | | **Spring** | | **Summer** | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Overview** | **Place Value**  Place value explained for primary school parents | TheSchoolRun  **Addition, Subtraction, Multiplication and Division**  Skip Counting Songs for Multiplication and Division Facts | Math ... | **Fractions**  Fractions Illustrations, Royalty-Free Vector Graphics & Clip Art ...  **Position and Direction**  Royalty-free Direction, Position, Or Indication Sign - Wooden ... | **Decimals and Percentages**  Fircroft: Fractions, Decimals & Percentages  **Algebra**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\3DBE922.tmp** | **Converting units of measure**  Scale Clipart Apple - Weight Weighing Scale Scale Clipart, HD Png ...  **Perimeter, Area and Volume**  **C:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\389D9903.tmp**  View Ratio Clip Art at Clker.com - vector clip art online, royalty ...**Ratio** | **Properties of shape**  Area Clipart | Clipart Panda - Free Clipart Images  **Problem Solving**  Wonder Problem Solving Transparent & PNG Clipart Free Download - YWD | **Statistics**  Clipart Statistics Chart  **Investigations**  Private Investigator Clipart - Clip Art Library |
| **Suggested Content** | The National Curriculum Handbook for Secondary Teachers in England ...White Rose Maths - Trent Valley Teaching School AllianceNRICH Website ReviewNational Centre for Excellence in the Teaching of Mathematics - NCETMThird Space Learning - Maths Intervention ProgrammesC:\Users\rhunter\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7700841C.tmp | | | | | |

|  |  |  |
| --- | --- | --- |
| **KPIs** | | |
| **Autumn** | **Spring** | **Summer** |
| *6.1.1 Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit*  *6.1.2 Round any whole number to the required degree of accuracy*  *6.1.3 Use negative numbers in context and calculate intervals across zero*  *6.1.4 Solve number and practical problems that involve rounding, negative numbers and*  *comparing numbers up to 10 000 000*  *6.1.5 Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why*  *6.1.6 Multiply multi-digit numbers up to 4-digits by a 2-digit whole number using the formal written method of long multiplication*  *6.1.7 Divide numbers up to 4-digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context*  *6.1.8 Divide numbers up to 4-digits by a 2-digit number using the formal written method of short division, where appropriate, interpreting remainders according to the context*  *6.1.9 Perform mental calculations, including mixed numbers and large numbers in multiplication and division*  *6.1.10 Identify common factors, common multiples and prime numbers*  *6.1.11 Use their knowledge of the order of operations to carry out calculations involving the four operations*  *6.1.12 Consolidate all learning in relation to the four operations using formal efficient methods at all times*  *6.1.13 Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy*  *6.1.14 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination*  *6.1.15 Compare and order fractions, including fractions >1*  *6.1.16 Generate and describe linear number sequences*  *6.1.17 Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions*  *6.1.18 Subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions*  *6.1.19 Divide proper fractions by whole numbers*  *6.3.1 Describe positions on the full coordinate grid, all four quadrants*  *6.3.2 Draw and translate simple shapes on the coordinate plane and reflect them in the axes* | *6.1.20 Associate a fraction with division and calculate decimal fraction equivalents (for example 0.375) for a simple fraction (for example 3/8)*  *6.1.23 Multiply one digit numbers with up to 2 decimal places by whole numbers*  *6.1.24 Use written division methods in cases where the answer has up to 2 decimal places*  *6.1.25 Solve problems which require answers to be rounded to specifies degrees of accuracy*  *6.1.21 Recall and use equivalences between simple fractions, decimals and percentages, including different contexts*  *6.1.26 Solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360 and the use of percentages for comparison*  *6.1.27 Use simple formulae to solve problems*  *6.1.28 Express missing number problems algebraically*  *6.1.29 Find pairs of numbers that satisfy an equation with two unknowns*  *6.1.30 Enumerate possibilities of combinations of two variables*  *6.1.31 Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts*  *6.2.1 Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate*  *6.2.2 Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places*  *6.2.3 Convert between miles & km*  *6.1.31 Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts*  *6.1.32 Solve problems involving similar shapes where the scale factor is unknown or can be found*  *6.1.33 Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples*  *6.1.34 Perform mental calculations, including with mixed operations and large numbers using efficient strategies such as manipulating expressions using commutative and distributive properties to simplify the calculation* | *6.3.3 Draw 2D shapes (triangles, quadrilaterals, pentagons, hexagons) using given dimensions and angles*  *6.3.4 Compare and classify geometric shapes based on their properties and sizes*  *6.3.5 Find unknown angles in any triangles, quadrilaterals, and regular polygons*  *6.3.6 Recognise, describe and build simple 3D shapes, including making nets*  *6.3.7 Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles*  *6.4.1 Interpret and construct: Pie charts, line graphs and use these to solve problems*  *6.4.2 Calculate and interpret the mean as an average (Mean, mode and median, range)* |