## S2 Curriculum for Excellence Level 3 Course

## August - September

| Number and number processes |  |
| :---: | :---: |
| 3-03a | I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions. https://www.mathsisfun.com/numbers/index.html |
| 3-03b | I can continue to recall number facts quickly and use them accurately when making calculations. |
| 3-04a | I can use my understanding of numbers less than zero to solve simple problems in context. https://www.mathsisfun.com/positive-negative-integers.htm\| |
| Ideas of chance and uncertainty |  |
| 3-22a | I can find the probability of a simple event happening and explain why the consequences of the event, as well as its probability, should be considered when making choices. https://www.mathsisfun.com/data/probability.htm\| |
| September - October |  |
| Fractions, decimal fractions and percentages hittps://www.mathsisfun.com/fractions-menu.htm\| https://www.mathsisfun.com/percentage-menu.html hittps://www.mathsisfun.com/decimals-menu.html |  |
| 3-07a | I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real life situations. . https://www.mathsisfun.com/decimal-fractionpercentage.html |
| 3-07b | By applying my knowledge of equivalent fractions and common multiples, I can add and subtract commonly used fractions. https://www.mathsisfun.com/fractions addition.htm\| |
| 3-07c | Having used practical, pictorial and written methods to develop my understanding. I can convert between whole or mixed numbers and fractions. . https://www.mathsisfun.com/proper-fractions.html |
| 3-08a | I can show how quantities that are related can be increased or decreased proportionally and apply this to solve problems in everyday context. https://www.mathsisfun.com/definitions/proportional.html |

## October Assessment

## Mathematics - its impact on the world, past present and future

| 3-12a | I have worked with others to research a famous mathematician and the work they are known for, or investigated a mathematical topic, and have prepared and delivered a short presentation. |
| :---: | :---: |
| November - December |  |
| Estimation and rounding hitps://www.mathsisfun.com/rounding-numbers.htm\| |  |
| 3-01a | I can round a number using an appropriate degree of accuracy, having taken into account the context of the problem |
| Data and analysis https://www.mathsisfun.com/data/ |  |
| 3-20a | I can work collaboratively, making appropriate use of technology, to source information presented in a variety of ways, interpret what it conveys and discuss whether I believe the information to be robust, vague or misleading |
| 3-20b | When analysing information or collecting data of my own, I can use my understanding of how bias may arise and how sample size can affect precision, to ensure that the data allows for fair conclusions to be drawn |
| 3-21a | I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams, graphs, making effective use of technology |
| Properties of 2D shapes and 3D objects |  |
| 3-16a | Having investigated a range of methods, I can accurately draw 2D shapes using appropriate mathematical instruments and methods. https://www.mathsisfun.com/geometry/construct-ruler-compass-1.html |
| Time |  |
| 3-10a | Using simple time periods I can work out how long a journey will take, the speed travelled at or distance covered, using my knowledge of the link between time, speed and distance. https://www.mathsisfun.com/measure/speed-velocity.html |


| January - February |  |
| :---: | :---: |
| Expressions and equations https://www.mathsisfun.com/algebra/index.html |  |
| 3-14a | I can collect like algebraic terms, simplify expressions and evaluate using substitution. . https://www.mathsisfun.com/algebra/liketerms.html https://www.mathsisfun.com/algebra/substitution.htm\| |
| 3-15a | Having discussed ways to express problems or statements using mathematical language, I can construct, and use appropriate methods to solve, a range of simple equations. |
| Patterns and relationships |  |
| 3-13a | Having explored number sequences, I can establish the set of numbers generated by a given rule and determine a rule for a given sequence, expressing it using appropriate notation. |
| February Assessment |  |
| February - March |  |
| Angle, symmetry and transformation |  |
| 3-17a | I can name angles and find their sizes using my knowledge of the properties of a range of 2D shapes and the angle properties associated with intersecting and parallel lines. . https://www.mathsisfun.com/angles.html <br> https://www.mathsisfun.com/geometry/parallel-lines.htm\| |
| 3-17b | Having investigated navigation in the world, I can apply my understanding of bearings and scale to interpret maps and plans and create accurate plans, and scale drawings of routes and journeys. https://www.mathsisfun.com/measure/compass-north-south-east-west.htm\| |
| 3-17c | I can apply my understanding of scale when enlarging or reducing pictures and shapes, using different methods, including technology. https://www.mathsisfun.com/definitions/scale.html |
| 3-18a | I can use my knowledge of the co-ordinate system to plot and describe the location of a point on a grid. https://www.mathsisfun.com/data/cartesian-coordinates.html |
| 3-19a | I can illustrate the lines of symmetry for a range of 2D shapes and apply my understanding to create and complete symmetrical pictures and patterns. https://www.mathsisfun.com/geometry/symmetry.html |
| April Assessment |  |
| April - June |  |
| Multiples, factors and primes https://www.mathsisfun.com/numbers/factors-multiples.html |  |
| 3-05a | I have investigated strategies for identifying common multiples and common factors, explaining my ideas to others and can apply my understanding to solve related problems. |
| 3-05b | I can apply my understanding of factors to investigate and identify when a number is prime. https://www.mathsisfun.com/definitions/prime-number.htm\| |
| Powers and roots https://www.mathsisfun.com/square-root.html https://www.mathsisfun.com/numbers/nth-root.html |  |
| 3-06a | Having explored the notation and vocabulary associated with whole number powers and the advantages of writing numbers in this form, I can evaluate powers of whole numbers mentally or using technology. |
| Measurement https://www.mathsisfun.com/measure/index.html |  |
| 3-11a | I can solve practical problems by applying my knowledge of measure, choosing the appropriate units and degree of accuracy for the task and using a formula to calculate area or volume when required. |
| 3-11b | Having investigated different routes to a solution, I can find the area of compound 2D shapes and the volume of compound 3D objects, applying my knowledge to solve practical problems. https://www.mathsisfun.com/area.html https://www.mathsisfun.com/geometry/cuboids-rectangular-prisms.html |
| June Assessment |  |
| Money https://www.mathsisfun.com/money/index.html |  |
| 3-09a | When considering how to spend my money, I can source, compare and contrast different contracts and services, discuss their advantages and disadvantages, and explain which offer best value to me. |
| 3-09b | I can budget effectively, making use of technology and other methods, to manage money and plan for future expenses. |

