

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths – Stage 1

YEAR: 7

Half Term: 1

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Geometrical reasoning: lines, angles and shapes	<p>To identify and describe rectangles, triangles, regular polygons and 3D shapes and their properties</p> <p>To calculate missing angles of a straight line, internal angles of triangle and around a point.</p>	<p>Use diagrams to identify different polygons and their properties.</p> <p>Confidently use the terms parallel and perpendicular</p> <p>Identify reflective symmetry by using mirrors or tracing paper in class</p> <p>Use diagrams with addition and subtraction methods to calculate the missing angles.</p>	<p>L3SSM1</p> <p>my maths - Shape, Angles, angle sums</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p>
Construction and Loci	<p>To be able to identify nets of 3D shapes such as cube, cuboid, prism and pyramid.</p> <p>To construct and identify angles</p>	<p>Match given nets with 3D shapes. Identify properties of 3D shapes</p> <p>Using a protractor, construct acute and obtuse angles accurately. Measure angles within a polygon.</p>	<p>L3SSM2</p> <p>L4SSM4</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p>
Ratio and proportion	<p>To use proportion to scale up and down simple quantities</p>	<p>Scale quantities up and down in proportion eg. Scale a recipe for 4 people up to a recipe for 6.</p>	<p>Ask to create own recipe for 4 people and then scale to another number of people.</p> <p>Revision</p>	<p>Peer, self and teacher assessment</p> <p>Weekly Homework</p> <p>Class test</p>

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Half Term: 2

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Fractions Decimals Percentages	To understand decimal notation To find fractions and % of a whole quantity To simplify fractions and find equivalent fractions	Learn decimal notation Solve problems such as $\frac{5}{8}$ of 96, 60% of £240 Learn how to simplify fractions and identify equivalent fractions	L3NNS4 <u>Mymaths</u> Simple Equivalent Fractions	Peer, self and teacher assessment Weekly homework
Processing and representing data Interpreting and discussing result	To construct frequency tables, pictograms, bar and line graphs To interpret graphs To understand mode, median, range and mean	Learn how to draw pictograms, bar graphs and line graphs to display data Learn how to interpret graphs by commenting on the modal value, the range of values and the shape of the graph Solve problems involving mode, mean, range and median	L3HD2 L4HD1	Peer, self and teacher assessment Weekly homework
Statistical enquiry	To suggest, plan and test hypotheses	Carry out an investigation by collecting data. Organise and present information in appropriate graphs. Comment upon graphs and draw conclusions	L3HD1 Revision	Peer , self and teacher assessment Class test

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Half Term: 3

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Integers, Powers and Roots	<p>To be able to understand what a factor is and find LCM and HCF</p> <p>To find the difference between negative and positive integers</p> <p>To identify square numbers and their roots and prime numbers and their factors</p>	<p>Discuss multiples and patterns within multiples. Explore patterns in factors, square number and prime numbers</p> <p>Use a number line to discuss positive and negative integers.</p> <p>Understand the use of positive and negatives in practical situations, such as temperature.</p>	<p>L4NNS2</p> <p><u>mymaths</u> Negative Numbers 1</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p>
Probability	<p>To predict outcomes using correct language and also understand the probability scale 0-1</p>	<p>Give simple examples, such as coin tossing, to illustrate probability.</p> <p>Develop understanding of further the likelihood, eg. It will snow tomorrow.</p> <p>Match the language scale to the 0-1 scale for the same predictions to show comparison,</p>	<p>Make own scale from 0-1 with 6 events.</p> <p><u>mymaths</u> Probability Introduction</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p>
Mental Calculations and checking	<p>To mentally calculate whole number calculations and decimal calculation by using place value knowledge.</p> <p>To use inverses to check calculations.</p>	<p>Illustrate how to use quick methods to do calculations and checking by inverse.</p> <p>Compete as a team in the mental maths quiz.</p> <p>Learn how to divide and multiply basic decimals</p>	<p>my Maths</p> <p>Number – add subtract mental – 4 – all sums and numbers</p> <p>Revision</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p> <p>Class test</p>

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths – Stage 1

YEAR: 7

Half Term: 4

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Sequences , functions and graphs and co-ordinators	To read and plot points in all four quadrants	Learn how to read axes correctly and describe plotted points using positive and negative co-ordinates	L3SSM3	Peer, self and teacher assessment Weekly homework
Transformations	To understand reflections, rotations and translations	Learn what reflections, rotations and translations look like and draw them correctly	<u>Mymaths</u> Lines of symmetry Rotational symmetry	Peer , self and teacher assessment Weekly homework
Written calculations and checking	To add and subtract whole numbers and decimals To multiply and divide using written methods	Solve problems e.g. $3.2 + 14 + 19.2$ Solve problems e.g. $HTU \times U$, $TU \times TU$ $HTU \div U$	L3CALC6 L4CALC6 Revision	Peer , self and teacher assessment Class test

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths – Stage 1

YEAR: 7

Half Term: 5

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Sequences Functions and Graphs	<p>To be able to count up and down in integers and decimals</p> <p>To be able to identify term to term sequences and patterns</p>	<p>Make examples of patterns using both integers and decimals, both increasing and decreasing.</p> <p>Create and develop a pattern using shape or codes</p> <p>Introduce Fibonacci sequence, decimal sequences.</p> <p>Begin to develop to multiplication and subtractions patterns</p>	<p>Producing a set of 3 sequence challenges for the rest of the class</p> <p>L3ALG1</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p>
Calculations and checking	<p>To understand place value</p> <p>To round decimals and integers to given number of places.</p>	<p>Learn correct mathematical vocabulary</p> <p>Use “High five or stay the same” to learn how to round numbers</p>	<p>L4CALC6</p> <p>L4NNS3</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p>
Solving Problems	<p>To use all four operations in order to solve given problems</p> <p>To find solutions in context of problem</p> <p>To record calculations needed to solve a problem.</p>	<p>Work in groups on word based problems which use all four operations.</p> <p>Learn from paired work and verbal discussion how to check that working out makes sense</p>	<p>Create own mathematical problem,</p> <p>Revision</p>	<p>Peer, self and teacher assessment</p> <p>Weekly homework</p> <p>Class test</p>

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths – Stage 1

YEAR: 7

Half Term: 6

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Equations, formulae, identities and expressions	To solve a range of problems involving algebra	Learn how letter symbols can be used to solve problems in mathematics Simplify expressions by collecting like terms	<u>Mymaths</u> Simple Equations Q1	Peer, self and teacher assessment Weekly homework
Geometrical reasoning and mensuration	To estimate, draw and measure acute and obtuse angles. Identify parallel and perpendicular lines	Learn key angle vocabulary: parallel, perpendicular, acute, obtuse Use a protractor to draw and measure acute and obtuse angles accurately Be able to label parallel and perpendicular lines	Produce a poster of key words	Peer, self and teacher assessment Weekly homework
Measures and mensuration area	To measure and calculate the area and perimeter of rectangles	Use a ruler to measure lengths and widths to 1 decimal place Understand and use the formula for the area of a rectangle Be able to work out the perimeter of squares and rectangles	L4SSM6	Peer, self and teacher assessment Weekly homework
Measures and mensuration	To understand metric units To read and interpret scales on measuring instruments	Learn how to convert between metric units e.g. How many millilitres in 2.75 litres Learn how to read and interpret different scales	L3SSM5 L4SSM5 Revision	Peer , self and teacher assessment Class test