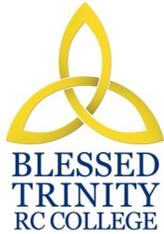| Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Geometrical reasoning: lines, angles and shapes	To label lines, angles and shapes To be able to identify parallel, perpendicular lines To calculate missing angles in diagrams	Learn correct mathematical vocabulary Label various shapes, lines and angles correctly with their mathematical properties Solve problems involving: the sum of angles at a point, on a straight line, the sum of angles in a triangle Recognise vertically opposite angles	L4SSM1	Peer, self and teacher assessment
Construction and Loci	To understand how to complete basic constructions using compasses and straight edge	Use a ruler and protractor to measure and draw lines and angles accurately (including reflex angles) Construct a triangles accurately using compasses and protractor	L5SSM4	Peer, self and teacher assessment

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths - Stage 2 **YEAR:** 8 **Half Term:** 1

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Equations, formulae, identities and expressions	To be able to solve a range of problems involving algebra	Use letter symbols to solve problems Understand that algebraic operations follow the rules of arithmetic Simplify expressions by collecting like terms Substitute into expressions Expand a single bracket	**L4ALG1**	Peer, self and teacher assessment
Ratio and proportion	To understand the relationship between ratio and proportion	Solve problems such as: Use direct proportion in simple contexts Use ratio notation Simplify ratios, divide a quantity into in a given ratio	**L4NNS6**	Peer, self and teacher assessment **Class Test**

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths - Stage 2   **YEAR:** 8   **Half Term:** 2

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Fractions, decimals and percentages	To be able to solve problems involving fractions, decimals and percentages	Simplify fractions Convert between fractions, decimals and percentages Compare fractions using diagrams Calculate with fractions and the four operations Calculate fractions and percentages of quantities	**L4NNS4** **L5NNS5**	Peer, self and teacher assessment
Processing and representing data; Interpreting and discussing results	To be able to solve problems involving the manipulation and representation of data.	Calculate mean, mode, median and range. Decide which average is the most appropriate to use in a given situation Draw accurate bar charts and pie charts for discrete and continuous data	**L4HD4** **L4HD5**	Peer, self and teacher assessment
Statistical Enquiry	To plan how to collect and organise small sets of data from surveys and experiments and analyse results.	Undertake a small statistical investigation using the Data Handling Cycle, Eg."Boys in year 7 are taller than girls on average" Incorporating: design of data collection sheets or questionnaires, frequency tables, comparison of data using appropriate calculations and diagrams	**L4HD2**	Peer, self and teacher assessment **Class Test**

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths - Stage 2   **YEAR:** 8   **Half Term:** 3

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Types of number	To solve problems involving multiples, factors and primes. To be able to use negative numbers correctly. Know and use squares and square roots and triangle numbers	Find highest common factors and lowest common multiples Add and subtract negative numbers in context. Calculate square numbers up to 12 x 12 and corresponding roots. Write out the first few triangle numbers. Perform simple tests of divisibility.	**L5NNS3** **L5CALC4**	Peer, self and teacher assessment
Probability	To be able to solve problems involving simple probability	Use vocabulary of probability correctly. Use the probability scale from 0 to 1. Calculate simple probabilities based on equally likely outcomes. List all the outcomes of mutually exclusive events. Estimate probabilities from a simple experiment. Compare theoretical and experimental probabilities.	**L5HD3**	Peer, self and teacher assessment
Mental calculations and checking	To be able to solve a range of number problems using mental methods and check results	Use the rules of arithmetic and inverse operations Use order of mathematical operations correctly (BIDMAS) Use mental methods to calculate with fractions, decimals and percentages Check results are of the right order of magnitude by working problems backwards	**L4CALC1** **L4CALC2**	Peer, self and teacher assessment **Class test**

BLESSED TRINITY LEARNING PROGRAMME

SUBJECT: Maths - Stage 2   **YEAR:** 8   **Half Term:** 4

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Sequences, functions and graphs	To be able to solve problems involving coordinates, functions, mappings, straight line graphs and real life graphs	Write simple functions in words. Represent functions in mappings. Generate coordinate pairs that satisfy a simple rule Recognise straight line graphs parallel to the x and y axes Plot and interpret graphs arising from real life situations.	**L4ALG2**	Peer, self and teacher assessment
Transformations and coordinates	To be able to solve problems involving transformations	Use the language associated with reflection, rotation and translation Recognise line symmetry in 2D shapes Transform 2D shapes by reflecting in a mirror line, rotating about a point or translating.	Research line symmetry in a range of logos **L4SSM3**	Peer, self and teacher assessment
Written calculations and checking	To be able to estimate, approximate and check working	Use the rules of arithmetic for whole numbers and decimals, check answers using inverse operations Complete long multiplication and division calculations. Use the order of operations correctly (BIDMAS) Work problems backwards using inverse operations to check answers are of the right magnitude.	**L4CALC3** **L4CALC5**	Peer, self and teacher assessment **Class test**

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Sequences	To represent problems making correct use of symbols, words, diagrams, tables and graphs	Describe and generate integer sequences Find a term using the previous term. Find a term given its position in the sequence Generate sequences from patterns and practical contexts Find the nth term of a sequence	To carry out an investigation of a mathematical pattern	Peer, self and teacher assessment
Written calculations and checking	To be able to solve problems using efficient written methods	Use the order of operations including brackets Add and subtract whole numbers and decimals using efficient methods Perform accurate long multiplication and division calculations (including decimals with one or two decimal places by a single digit whole number) Use calculator functions correctly Check that results are of the correct magnitude	**L4CALC3** **L4CALC5**	Peer, self and teacher assessment

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Calculations and checking	To be able to solve problems involving place value, rounding and efficient mental methods	Multiply and divide integers by 10, 100 and 1000 and explain the effect Compare and order decimals (including using measurements) Round positive whole numbers to nearest 10, 100 or 1000 Round decimals to nearest whole number, 1 decimal place Use the order of operations correctly (including brackets) Perform mental calculations using fractions, decimals and percentages	**L4NNS5** **L5NNS1** **L4CALC4**	Peer, self and teacher assessment **Class test**

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Equations, formulae, identities and expressions	To be able to solve problems using algebra	Know the meaning of the words term, expression and equation Construct and solve equations with unknown on one side only Solve real life problems through the use of algebra		Peer, self and teacher assessment
Geometrical Reasoning and Mensuration	To be able to solve problems involving 2-D and 3-D shapes	Match up plan and other elevations to 3-D objects Visualise 3-D shapes and deduce some of their properties Correctly identify coordinates in all four quadrants using correct notation Find coordinates of vertices of shapes Calculate the surface area of cubes and cuboids	**L4SSM2** Co-ordinate puzzle	Peer, self and teacher assessment

Title	Learning Objectives	Classroom Activity	Recommended Homework	Marking & Assessment
Measures and mensuration	To be able to solve problems involving area, perimeter and units of measurement	Choose correct units of measurement to use in different scenarios and solve problems in everyday contexts Calculate the area of rectangles Calculate the perimeter of shapes made from rectangle Convert one unit into another (eg. grams to kilograms) Read and interpret scales on a range of measuring instruments Distinguish between and estimate the size of acute, obtuse and reflex angles	Research task on metric and Imperial units mymaths task Converting units	Peer, self and teacher assessment **Class Test**