



Key Stage Three:

By the end of key stage 3, pupils are expected to know, apply and understand the matters, skills and processes specified in the programme of study.

Pupils should be taught to: Working Mathematically...	At St Gregory's Catholic High School, this is taught
Consolidate their numerical and mathematical capability from key stage 2 and extend their understanding of the number system and place value to include decimals, fractions, powers and roots	Y7 Term 1 - Equality and Equivalence Y7 Term 1 - Fraction, Decimal and Percentage Y7 Term 3 - Developing Number Sense Y8 Term 1 - Multiplying and Dividing Fractions
Select and use appropriate calculation strategies to solve increasingly complex Problems	Y7 Term 2 - Solving Problems with Multiplication and Division Y7 Term 2 - Operations and Equations with Directed Number Y7 Term 2 - Addition and Subtraction of Fractions Y7 Term 3 - Developing Number Sense Y8 Term 1 - Multiplying and Dividing Fractions Y9 Term 2 - Maths and Money
Use algebra to generalise the structure of arithmetic, including to formulate mathematical relationships	Y7 Term 1 - Understanding and using algebraic notation Y7 Term 1 - Equality and Equivalence
Substitute values in expressions, rearrange and simplify expressions, and solve Equations	Y7 Term 1 - Understanding and using algebraic notation Y8 Term 2 - Indices
Move freely between different numerical, algebraic, graphical and diagrammatic representations [for example, equivalent fractions, fractions and decimals, and equations and graphs]	Y7 Term 1- Exploring Sequences Y7 Term 1 - Understanding and using algebraic notation Y7 Term 1 - Fraction, Decimal and Percentage Y7 Term 2 - Addition and Subtraction of Fractions Y8 Term 1 - Multiplicative Change Y8 Term 1 - Working in the Cartesian Plane Y9 Term 1 - Forming and Solving Equations
Develop algebraic and graphical fluency, including understanding linear and simple quadratic functions	Y8 Term 1 - Working in the Cartesian Plane Y9 Term 1 - Straight Line Graphs

Use language and properties precisely to analyse numbers, algebraic expressions, 2-D and 3-D shapes, probability and statistics.	<p>Y7 Term 3 - Constructing and Measuring and Using Geometric Notation</p> <p>Y7 Term 3 - Developing Geometric Reasoning</p> <p>Y8 Term 1 - Representing Data</p> <p>Y8 Term 1 - Tables and Probability</p> <p>Y8 Term 2 - Indices</p> <p>Y9 Term 1 - 3D shapes</p>
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Pupils should be taught to: Reason Mathematically...	At St Gregory's Catholic High School, this is taught
Extend their understanding of the number system; make connections between number relationships, and their algebraic and graphical representations	<p>Y7 Term 1 - Fraction, Decimal and Percentage</p> <p>Y8 Term 1 - Ratio and Scale</p> <p>Y8 Term 1 - Working in the Cartesian Plane</p>
Extend and formalise their knowledge of ratio and proportion in working with measures and geometry, and in formulating proportional relations algebraically	Y8 Term 1 - Multiplicative Change
Identify variables and express relations between variables algebraically and graphically	Y8 Term 1 - Brackets, Equations and Inequalities
Make and test conjectures about patterns and relationships; look for proofs or counter examples	<p>Y7 Term 1 - Exploring Sequences</p> <p>Y7 Term 3 - Prime Numbers and Proof</p> <p>Y9 Term 1 - Testing Conjectures</p>
Begin to reason deductively in geometry, number and algebra, including using geometrical constructions	<p>Y7 Term 3 - Constructing and Measuring and Using Geometric Notation</p> <p>Y7 Term 3 - Developing Geometric Reasoning</p> <p>Y7 Term 3 - Developing Number Sense</p> <p>Y7 Term 3 - Prime Numbers and Proof</p> <p>Y9 Term 1 - Testing Conjectures</p> <p>Y9 Term 2 - Pythagoras' Theorem</p>
Interpret when the structure of a numerical problem requires additive, multiplicative or proportional reasoning	<p>Y8 Term 1 - Multiplicative Change</p> <p>Y9 Term 2 - Maths and Money</p>
Explore what can and cannot be inferred in statistical and probabilistic settings, and begin to express their arguments formally	<p>Y7 Term 3 - Sets and Probability</p> <p>Y8 Tables and Probability</p> <p>Y9 Term 3 - Probability</p>

Pupils should be taught to: Solve Problems...	At St Gregory's Catholic High School, this is taught
Develop their use of formal mathematical knowledge to interpret and solve problems, including in financial mathematics	Y9 Term 2 - Rotation and Translation
Begin to model situations mathematically and express the results using a range of formal mathematical representations	Y8 Term 2 - Brackets, Equations and Inequalities Y8 Term 2 - Indices Y9 Term 2 - Pythagoras' Theorem
Select appropriate concepts, methods and techniques to apply to unfamiliar and non-routine problems	Covered in all years and topics.

Pupils should be taught to: Number	At St Gregory's Catholic High School, this is taught
Understand and use place value for decimals, measures and integers of any size	Y7 Term 1 - Equality and Equivalence
Order positive and negative integers, decimals and fractions; use the number line as a model for ordering of the real numbers; use the symbols =, ≠, <, >, ≤, ≥	Y7 Term 1 - Equality and Equivalence Y7 Term 2 - Addition and Subtraction of Fractions
Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation and the unique factorisation property	Y7 Term 2- Solving Problems with Multiplication and Division Y7 Term 3 - Prime Numbers and Proof Y9 Term 2 - Numbers
Use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative use conventional notation for the priority of operations, including brackets, powers, roots and reciprocals	Y7 Term 2- Solving Problems with Addition and Subtraction Y7 Term 2- Solving Problems with Multiplication and Division Y7 Term 2- Fractions and Percentages of Amounts Y7 Term 2- Operations and Equations with Directed Number Y7 Term 2- Addition and Subtraction of Fractions Y8 Term 1 - Multiplying and Dividing Fractions Y9 Term 2 - Numbers
Recognise and use relationships between operations including inverse operations	Y7 Term 1- Understanding and using algebraic notation Y7 Term 2- Solving Problems with Addition and Subtraction Y7 Term 2- Solving Problems with Multiplication and Division Y7 Term 2- Operations and Equations with Directed Number

Use integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations	Y7 Term 2- Operations and Equations with Directed Number Y7 Term 3- Prime Numbers and Proof Y8 Term 2 - Standard Index Form
Interpret and compare numbers in standard form $A \times 10^n$ $1 \leq A < 10$, where n is a positive or negative integer or zero	Y7 Term 1- Equality and Equivalence Y8 Term 2 - Standard Index Form Y9 Term 2 - Numbers
Work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and or 0.375 and)	Y7 Term 1- Equality and Equivalence Y7 Term 2- Addition and Subtraction of Fractions Y8 Term 2 - Fractions and Percentages
Define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%	Y7 Term 1- Fraction, Decimal and Percentage Y7 Term 1- Fraction, Decimal and Percentage Y7 Term 1- Fraction, Decimal and Percentage Y8 Term 2 - Fractions and Percentages Y9 Term 2 - Percentages
Interpret fractions and percentages as operators	Y7 Term 2- Fractions and Percentages of Amounts Y8 Term 2 - Fractions and Percentages Y9 Term 2 - Percentages
Use standard units of mass, length, time, money and other measures, including with decimal quantities	Y8 Term 2 - Number Sense
Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]	Y7 Term 1- Equality and Equivalence Y8 Term 2 - Number Sense
Use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$	Y7 Term 1- Equality and Equivalence Y8 Term 2 - Number Sense
Use a calculator and other technologies to calculate results accurately and then interpret them appropriately	Y7 Term 1- Exploring Sequences Y7 Term 2- Operations and Equations with Directed Number Y8 Number Sense
Appreciate the infinite nature of the sets of integers, real and rational numbers	Y7 Term 3- Developing Number Sense Y9 Term 2 - Numbers

Pupils should be taught to: Algebra

At St Gregory's Catholic High School, this is taught

Use and interpret algebraic notation, including ab in place of $a \times b$, $3y$ in place of $y + y + y$ and $3 \times y$, a^2 in place of $a \times a$, a^3 in place of $a \times a \times a$; a^2b in place of $a \times a \times b$, a/b in place of $a \div b$	Y8 Term 2 - Indices
Coefficients are written as fractions rather than as decimals	Y8 Term 2 - Indices
Substitute numerical values into formulae and expressions, including scientific formulae understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors simplify and manipulate algebraic expressions to maintain equivalence by collecting like terms, multiplying a single term over a bracket, taking out common factors, expanding products of two or more binomials, understand and use standard mathematical formulae; rearrange formulae to change the subject, model situations or procedures by translating them into algebraic expressions or formulae and by using graphs	Y7 Term 2- Solving Problems with Multiplication and Division Y7 Term 2- Operations and Equations with Directed Number Y7 Term 1- Equality and Equivalence Y8 Term 1 - Working in the Cartesian Plane Y8 Term 2 - Brackets, Equations and Inequalities Y9 Term 1 - Testing Conjectures Y9 Term 1 - Forming and Solving Equations
Use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement)	Y7 Term 2- Operations and Equations with Directed Number Y8 Term 2 - Brackets, Equations and Inequalities Y9 Term 3 - Algebraic Representation
Work with coordinates in all four quadrants	Y8 Term 1 - Working in the Cartesian Plane
Recognise, sketch and produce graphs of linear and quadratic functions of one variable with appropriate scaling, using equations in x and y and the Cartesian plane	Y7 Term 1- Understanding and using algebraic notation Y8 Term 1 - Working in the Cartesian Plane Y9 Term 1 - Straight Line Graphs Y9 Term 3 - Algebraic Representation
Interpret mathematical relationships both algebraically and graphically	Y9 Term 1 - Straight Line Graphs
Reduce a given linear equation in two variables to the standard form $y = mx + c$; calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically	Y9 Term 1 - Straight Line Graphs
Use linear and quadratic graphs to estimate values of y for given values of x and vice versa and to find approximate solutions of simultaneous linear equations	Y9 Term 1 - Straight Line Graphs Y9 Term 3 - Algebraic Representation
Find approximate solutions to contextual problems from given graphs of a variety of functions, including piece-wise linear, exponential and reciprocal graphs	Y9 Term 3 - Algebraic Representation

Generate terms of a sequence from either a term-to-term or a position-to-term rule	Y7 Term 1- Exploring Sequences Y7 Term 1- Understanding and using algebraic notation Y8 Term 2 - Sequences
Recognise arithmetic sequences and find the nth term	Y7 Term 1- Exploring Sequences Y8 Term 2 - Sequences
Recognise geometric sequences and appreciate other sequences that arise	Y7 Term 1- Exploring Sequences Y8 Term 2 - Sequences

Pupils should be taught to: Ratio, Proportion and Rates of Change	At St Gregory's Catholic High School, this is taught
Change freely between related standard units [for example time, length, area, volume/capacity, mass]	Y7 Term 2- Solving Problems with Multiplication and Division Y9 Term 3 - Rates
Use scale factors, scale diagrams and maps	Y8 Term 1 - Ratio and Scale Y8 Term 1 Multiplicative Change Y9 Term 3 - Enlargement and Similarity
Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1	Y7 Term 2- Addition and Subtraction of Fractions
Use ratio notation, including reduction to simplest form	Y8 Term 1 - Ratio and Scale Y9 Term 3 - Solving Ratio and Proportion Problems
Divide a given quantity into two parts in a given part: part or part: whole ratio; express the division of a quantity into two parts as a ratio understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction	Y8 Term 1 - Ratio and Scale Y9 Term 3 - Solving Ratio and Proportion Problems Y9 Term 3 - Enlargement and Similarity Y9 Term 3 - Rates
Relate the language of ratios and the associated calculations to the arithmetic of fractions and linear functions	Y9 Term 3 - Solving Ratio and Proportion Problems
Solve problems involving percentage change, including percentage increase, decrease and original value problems and simple interest in financial mathematics	Y9 Term 2 - Percentages Y9 Term 2 - Maths and Money
Solve problems involving direct and inverse proportion, including graphical and algebraic representations	Y8 Term 1 - Ratio and Scale Y8 Term 1 - Multiplicative Change Y9 Term 1 - Straight Line Graphs Y9 Term 3 - Solving Ratio and Proportion Problems
Use compound units such as speed, unit pricing and density to solve problems	Y9 Term 3 - Solving Ratio and Proportion Problems

Pupils should be taught to: Geometry	At St Gregory's Catholic High School, this is taught
Derive and apply formulae to calculate and solve problems involving: perimeter and area of triangles, parallelograms, trapezia, volume of cuboids (including cubes) and other prisms (including cylinders)	Y7 Term 2- Solving Problems with Addition and Subtraction Y7 Term 2- Solving Problems with Multiplication and Division Y8 Term 3 - Area and Trapezia of Circles Y9 Term 1 - 3D shapes
Calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes	Y8 Term 3 - Area and Trapezia of Circles
Draw and measure line segments and angles in geometric figures, including interpreting scale drawings	Y7 Term 3- Constructing and Measuring and Using Geometric Notation Y9 Term 1 - Construction and Congruency
Derive and use the standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle); recognise and use the perpendicular distance from a point to a line as the shortest distance to the line	Y8 Term 3 - Angles in Parallel Lines and Polygons Y9 Term 1 - Construction and Congruency Y9 Term 2 - Deduction
Describe, sketch and draw using conventional terms and notations: points, lines, parallel lines, perpendicular lines, right angles, regular polygons, and other polygons that are reflectively and rotationally symmetric	Y7 Term 3- Constructing and Measuring and Using Geometric Notation Y7 Term 3- Developing Geometric Reasoning Y8 Term 3 - Lines, Symmetry and Reflection Y9 Term 1 - Construction and Congruency Y9 Term 2 - Deduction Y9 Term 2 - Rotation and Translation
Use the standard conventions for labelling the sides and angles of triangle ABC, and know and use the criteria for congruence of triangles	Y7 Term 3- Constructing and Measuring and Using Geometric Notation Y7 Term 3- Developing Geometric Reasoning Y8 Term 3 - Angles in Parallel Lines and Polygons Y9 Term 1 - Construction and Congruency
Derive and illustrate properties of triangles, quadrilaterals, circles, and other plane figures [for example, equal lengths and angles] using appropriate language and technologies	Y7 Term 3- Developing Geometric Reasoning Y8 Term 3 - Angles in Parallel Lines and Polygons
Identify properties of, and describe the results of, translations, rotations and reflections applied to given figures	Y8 Term 3 - Lines, Symmetry and Reflection Y9 Term 2 - Rotation and Translation

Identify and construct congruent triangles, and construct similar shapes by enlargement, with and without coordinate grids	Y7 Term 3- Constructing and Measuring and Using Geometric Notation Y9 Term 3 - Enlargement and Similarity
Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles	Y7 Term 3- Developing Geometric Reasoning Y8 Term 3 - Angles in Parallel Lines and Polygons Y9 Term 2 - Deduction
Understand and use the relationship between parallel lines and alternate and corresponding angles	Y7 Term 3- Developing Geometric Reasoning Y8 Term 3 - Angles in Parallel Lines and Polygons Y9 Term 2 - Deduction
Derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon, and to derive properties of regular polygons	Y7 Developing Geometric Reasoning Y8 Term 3 - Angles in Parallel Lines and Polygons
Apply angle facts, triangle congruence, similarity and properties of quadrilaterals to derive results about angles and sides, including Pythagoras' Theorem, and use known results to obtain simple proofs	Y7 Developing Geometric Reasoning Y9 Term 2 - Pythagoras' Theorem Y9 Term 3 - Enlargement and Similarity
Use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles	Y9 Term 2 - Pythagoras' Theorem Y9 Term 3 - Enlargement and Similarity
Interpret mathematical relationships both algebraically and geometrically	Y9 Term 2 - Pythagoras' Theorem

Pupils should be taught to: Probability	At St Gregory's Catholic High School, this is taught
Record, describe and analyse the frequency of outcomes of simple probability experiments involving randomness, fairness, equally and unequally likely outcomes, using appropriate language and the 0-1 probability scale	Y7 Term 3- Sets and Probability Y8 Term 1 - Tables and Probability Y9 Term 3 - Probability
Understand that the probabilities of all possible outcomes sum to 1	Y7 Term 3- Developing Number Sense Y9 Term 3 - Probability
Enumerate sets and unions/intersections of sets systematically, using tables, grids and Venn diagrams	Y7 Term 3- Developing Number Sense Y9 Term 3 - Probability
Generate theoretical sample spaces for single and combined events with equally likely, mutually exclusive outcomes and use these to calculate theoretical probabilities	Y7 Term 3- Developing Number Sense Y8 Term 1 - Tables and Probability Y9 Term 3 - Probability

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Pupils should be taught to: Statistics	At St Gregory's Catholic High School, this is taught
Describe, interpret and compare observed distributions of a single variable through appropriate graphical representation involving discrete, continuous and grouped data; and appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers)	Y7 Term 1- Equality and Equivalence Y7 Term 2- Solving Problems with Multiplication and Division Y8 Term 1 - Representing Data Y8 Term 3 - Data Handling Cycle Y8 Term 3 - Measures of Location
Construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, and pictograms for categorical data, and vertical line (or bar) charts for ungrouped and grouped numerical data	Y7 Term 1- Fraction, Decimal and Percentage Y7 Term 2- Solving Problems with Addition and Subtraction Y7 Term 3- Constructing and Measuring and Using Geometric Notation Y8 Term 1 - Representing Data Y8 Term 1 - Representing Data Y8 Term 3 - Data Handling Cycle
Describe simple mathematical relationships between two variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs.	Y8 Term 1 - Representing Data

Key Stage Four:

By the end of key stage 4, pupils are expected to know, apply and understand the matters, skills and processes specified in the programme of study.

Pupils should be taught to: Develop Fluency	At St Gregory's Catholic High School, this is taught	
	Higher	Foundation
Consolidate their numerical and mathematical capability from key stage 3 and extend their understanding of the number system to include powers, roots {and fractional indices}	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Select and use appropriate calculation strategies to solve increasingly complex problems, including exact calculations involving multiples of π {and surds}, use of standard form and application and interpretation of limits of accuracy	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Consolidate their algebraic capability from key stage 3 and extend their understanding of algebraic simplification and manipulation to include quadratic expressions, {and expressions involving surds and algebraic fractions}	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Extend fluency with expressions and equations from key stage 3, to include quadratic equations, simultaneous equations and inequalities	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Move freely between different numerical, algebraic, graphical and diagrammatic representations, including linear, quadratic, reciprocal, {exponential and trigonometric} functions	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Use mathematical language and properties precisely	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3

Pupils should be taught to: Reason Mathematically	At St Gregory's Catholic High School, this is taught	
	Higher	Foundation
Extend and formalise their knowledge of ratio and proportion, including trigonometric ratios, in working with measures and geometry, and in working with proportional relations algebraically and graphically	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Extend their ability to identify variables and express relations between variables algebraically and graphically	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Make and test conjectures about the generalisations that underlie patterns and relationships; look for proofs or counter-examples; begin to use algebra to support and construct arguments {and proofs}	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3

Reason deductively in geometry, number and algebra, including using geometrical Constructions	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Interpret when the structure of a numerical problem requires additive, multiplicative or proportional reasoning	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Explore what can and cannot be inferred in statistical and probabilistic settings, and express their arguments formally	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Assess the validity of an argument and the accuracy of a given way of presenting the information	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3

Pupils should be taught to: Solve Problems	At St Gregory's Catholic High School, this is taught	
	Higher	Foundation
Develop their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Make and use connections between different parts of mathematics to solve Problems	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Model situations mathematically and express the results using a range of formal mathematical representations, reflecting on how their solutions may have been affected by any modelling assumptions	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3
Model situations mathematically and express the results using a range of formal mathematical representations, reflecting on how their solutions may have been affected by any modelling assumptions	Yr10/11 Term 1 - 3	Yr10/11 Term 1 - 3

Pupils should be taught to: Number	At St Gregory's Catholic High School, this is taught
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<p>Apply systematic listing strategies, {including use of the product rule for counting}</p>	<p>Y10H Term 1 - Calculations, checking and rounding, Indices, roots, reciprocals and hierarchy of operations, Factors, multiples and primes, Standard form, Surds</p> <p>Y10H Term 3 - Probability</p>	<p>Y10F Term 1 - Integers and Place Value, decimals, indices, powers and roots, factors, multiples and primes</p> <p>Y11F Term 1 - Probability</p>
<p>Estimate powers and roots of any given positive number}</p>	<p>Y10H Term 1 - Calculations, checking and rounding, Indices, roots, reciprocals and hierarchy of operations, Factors, multiples and primes, Standard form, Surds</p>	<p>Y10F I Term 1 - ntegers and Place Value, decimals, indices, powers and roots, factors, multiples and primes</p> <p>Y10F Term 3 - Right angled triangles, Pythagoras and trigonometry</p> <p>Y11F Term 2 - Fractions, Indices and standard form</p>
<p>Calculate with roots, and with integer {and fractional} indices</p>	<p>Y10H Term 1 - Calculations, checking and rounding, Indices, roots, reciprocals and hierarchy of operations, Factors, multiples and primes, Standard form, Surds</p> <p>Y10H Term 2 - Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p>	<p>Y10F Term 1-Fractions, decimals and percentages, Percentages</p> <p>Y10F Term 2 - Perimeter, area and volume, Circles, cylinders, cones and spheres</p> <p>Y11F Term 2 - Fractions, Indices and standard form</p>
<p>Calculate exactly with fractions, {surds} and multiples of π; {simplify surd expressions involving squares and rationalise denominators}</p>	<p>Y10H Term 1 - Calculations, checking and rounding, Indices, roots, reciprocals and hierarchy of operations,</p>	<p>Y11F Term 2 - Fractions, Indices and standard form</p>

	<p>Factors, multiples and primes, Standard form, Surds</p> <p>Y10H Term 1 - Algebra the basics, Setting up, rearranging and solving equations, Sequences</p> <p>Y10H Term 1 - Fractions and percentages, Ratio and proportion</p> <p>Y10H Term 2 - Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p> <p>Y10H Term 2 - Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres</p> <p>Y10H Term 3 - Accuracy and bounds</p> <p>Y10H Term 3 - Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 1 - Changing the subject of a formula (more complex), Algebraic fractions, Solving equations arising from algebraic fractions, Rationalising surds, proof</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2</p>	
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	brackets, Sketching graphs, Graphs of circles, cubics and quadratics	
Calculate with numbers in standard form $A \times 10^n$, where $1 \leq A < 10$ and n is an Integer	<p>Y10H Term 1- Calculations, checking and rounding, Indices, roots, reciprocals and hierarchy of operations, Factors, multiples and primes, Standard form, Surds</p> <p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p>	Y11F Term 2 - Fractions, Indices and standard form
{Change recurring decimals into their corresponding fractions and vice versa}	Y10H Term 1- Fractions and percentages, Ratio and proportion	
Identify and work with fractions in ratio problems	Y10H Term 1- Fractions and percentages, Ratio and proportion	Y10F Term 3-Ratio and Proportion
Apply and interpret limits of accuracy when rounding or truncating, {including upper and lower bounds}	<p>Y10H Term 2- Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres</p> <p>Y10H Term 3- Accuracy and bounds</p> <p>Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry</p>	Y10F Term 1-Equations and inequalities, Sequences

Pupils should be taught to: Algebra	At St Gregory's Catholic High School, this is taught
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<p>Simplify and manipulate algebraic expressions (including those involving surds {and algebraic fractions})</p>	<p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p> <p>Y10H Term 3- Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 1 - Changing the subject of a formula (more complex), Algebraic fractions, Solving equations arising from algebraic fractions, Rationalising surds, proof</p>	<p>Y10F Term 1-Algebra, the basics, Expressions – substituting into formulae, Expanding and Factorising</p>
<p>Factorising quadratic expressions of the form $x^2 + bx + c$, including the difference of two squares; {factorising quadratic expressions of the form $ax^2 + bx + c$ }</p>	<p>Y10H Term 3- Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p>	<p>Y10F Term 1-Algebra, the basics, Expressions – substituting into formulae, Expanding and Factorising</p> <p>Y10F Term 3- Right angled triangles, Pythagoras and trigonometry</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>
<p>Know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent and use algebra to support and construct arguments {and proofs}</p>	<p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p> <p>Y11H Term 1 - Changing the subject of a formula (more</p>	<p>Y10F Term 1- Algebra, the basics, Expressions – substituting into formulae, Expanding and Factorising</p>

	<p>complex), Algebraic fractions, Solving equations arising from algebraic fractions, Rationalising surds, proof</p>	<p>Y10F Term 1- Equations and inequalities, Sequences</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>
<p>Where appropriate, interpret simple expressions as functions with inputs and outputs; interpret the reverse process as the 'inverse function'; interpret the succession of two functions as a 'composite function'</p>	<p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p> <p>Y11H Term 1 - Changing the subject of a formula (more complex), Algebraic fractions, Solving equations arising from algebraic fractions, Rationalising surds, proof</p> <p>Y11H Term 2- Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	<p>Y10F Term 1- Algebra, the basics, Expressions – substituting into formulae, Expanding and Factorising</p> <p>Y10F Term 1- Equations and inequalities, Sequences</p> <p>Y10F Term 2- Real life graphs, Straight line graphs</p>
<p>Use the form $y = mx + c$ to identify parallel {and perpendicular} lines; find the equation of the line through two given points, or through one point with a given gradient</p>	<p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y10H Term 3- Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 1 - Graphs, the basics and real life graphs</p>	<p>Y10F Term 2- Real life graphs, Straight line graphs</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>

<p>Identify and interpret roots, intercepts and turning points of quadratic functions graphically; deduce roots algebraically {and turning points by completing the square}</p>	<p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y10H Term 3- Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 1 - Graphs, the basics and real life graphs</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p>	<p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>
<p>Recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions, the reciprocal function, {the exponential function, and the trigonometric functions (with arguments in degrees) $y = \sin x$, $y = \cos x$ and $y = \tan x$ for angles of any size}</p>	<p>Y10H Term 3- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y11H Term 1 - Graphs, the basics and real life graphs</p> <p>Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p>	<p>Y10F Term 2- Real life graphs, Straight line graphs</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>

	<p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	
{Sketch translations and reflections of the graph of a given function}	<p>Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry</p> <p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	
Plot and interpret graphs (including reciprocal graphs {and exponential graphs}) and graphs of non-standard functions in real contexts, to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration	<p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y11H Term 1 - Graphs, the basics and real life graphs</p> <p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	<p>Y10F Term 2- Real life graphs, Straight line graphs</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>
{Calculate or estimate gradients of graphs and areas under graphs (including quadratic and other non-linear graphs), and interpret results in cases such as distance-time graphs, velocity-time graphs and graphs in financial contexts}	<p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p>	

	<p>Y11H Term 2 - Graphs, the basics and real life graphs</p> <p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	
<p>{Recognise and use the equation of a circle with centre at the origin; find the equation of a tangent to a circle at a given point} solve quadratic equations {including those that require rearrangement} algebraically by factorising, {by completing the square and by using the quadratic formula}; find approximate solutions using a graph solve two simultaneous equations in two variables (linear/linear {or linear/quadratic}) algebraically; find approximate solutions using a graph</p>	<p>Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p> <p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y11H Term 2 - Graphs, the basics and real life graphs</p> <p>Y11H Term 2 - Circle theorems</p> <p>Y11H Term 2 - Circle geometry</p>	<p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>
<p>{Find approximate solutions to equations numerically using iteration}</p>	<p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p>	

<p>Translate simple situations or procedures into algebraic expressions or formulae; derive an equation (or two simultaneous equations), solve the equation(s) and interpret the solution</p>	<p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p> <p>Y10H Term 2- Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres</p> <p>Y10H Term 3- Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p> <p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	<p>Y10F Term 1- Algebra, the basics, Expressions – substituting into formulae, Expanding and Factorising</p> <p>Y10F Term 1- Equations and inequalities, Sequences</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>
<p>Solve linear inequalities in one {or two} variable{s}, {and quadratic inequalities in one variable}; represent the solution set on a number line, {using set notation and on a graph}</p>	<p>Y10H Term 3- Solving quadratic and simultaneous equations, Inequalities</p> <p>Y11H Term 2 - Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p>	<p>Y10F Term 1- Equations and inequalities, Sequences</p>
<p>Recognise and use sequences of triangular, square and cube numbers, simple arithmetic progressions, Fibonacci type sequences, quadratic sequences, and simple geometric progressions (r^n where n is an integer, and r is a positive rational</p>	<p>Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences</p>	<p>Y10F Term 1- Equations and inequalities, Sequences</p>

number {or a surd}) {and other sequences}		
Deduce expressions to calculate the nth term of linear {and quadratic} sequences	Y10H Term 1- Algebra the basics, Setting up, rearranging and solving equations, Sequences	Y10F Term 1- Equations and inequalities, Sequences

Pupils should be taught to: Ratio, Proportion and Rates of Change	At St Gregory's Catholic High School, this is taught	
<p>compare lengths, areas and volumes using ratio notation and/or scale factors; make links to similarity (including trigonometric ratios)</p>	<p>Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p> <p>Y11H Term 1 - Similarity and congruence in 2D and 3D</p>	<p>Y10F Term 3- Transformations</p> <p>Y10F Term 3- Ratio and Proportion</p> <p>Y10F Term 3- Right angled triangles, Pythagoras and trigonometry</p> <p>Y11F Term 2 - Similarity and congruence in 2D, Vectors</p>
<p>Convert between related compound units (speed, rates of pay, prices, density, pressure) in numerical and algebraic contexts</p>	<p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y11H Term 1 - Graphs, the basics and real life graphs</p> <p>Y11H Term 1 - Multiplicative reasoning, Direct and inverse proportion, relating to graph form for compound measures, Repeated proportional change</p>	<p>Y10F Term 2- Real life graphs, Straight line graphs</p> <p>Y11F Term 1 - Multiplicative reasoning, More percentages, Rates of change, Compound measures</p>

	<p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	
<p>Understand that X is inversely proportional to Y is equivalent to X is proportional to $1/Y$, {construct and} interpret equations that describe direct and inverse proportion</p>	<p>Y11H Term 1 Multiplicative reasoning, Direct and inverse proportion, relating to graph form for compound measures, Repeated proportional change</p> <p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	<p>Y10F Term 3- Ratio and Proportion</p> <p>Y11F Term 1 - Multiplicative reasoning, More percentages, Rates of change, Compound measures</p>
<p>Interpret the gradient of a straight line graph as a rate of change; recognise and interpret graphs that illustrate direct and inverse proportion</p>	<p>Y10H Term 2- Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Y11H Term 1 - Graphs, the basics and real life graphs</p> <p>Y11H Term 1 - Multiplicative reasoning, Direct and inverse proportion, relating to graph form for compound measures, Repeated proportional change</p>	<p>Y10F Term 2- Real life graphs, Straight line graphs</p> <p>Y10F Term 3- Ratio and Proportion</p> <p>Y11F Term 1 - Quadratic equations, Expanding and factorising, Graphs, Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations</p>

	<p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	
<p>{Interpret the gradient at a point on a curve as the instantaneous rate of change; apply the concepts of instantaneous and average rate of change (gradients of tangents and chords) in numerical, algebraic and graphical contexts}</p>	<p>Y11H Term 2 - Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2 - Direct and inverse proportion</p>	
<p>Set up, solve and interpret the answers in growth and decay problems, including compound interest {and work with general iterative processes}</p>	<p>Y11H Term 1 Multiplicative reasoning, Direct and inverse proportion, relating to graph form for compound measures, Repeated proportional change</p> <p>Y11H Term 2-Quadratics, Expanding more than 2 brackets, Sketching graphs, Graphs of circles, cubics and quadratics</p> <p>Y11H Term 2-Reciprocal and exponential graphs, Gradient and area under graphs</p> <p>Y11H Term 2-Direct and inverse proportion</p>	<p>Y11F Term 1 - Multiplicative reasoning, More percentages, Rates of change, Compound measures</p>

Pupils should be taught to: Geometry and Measures	At St Gregory's Catholic High School, this is taught	
Interpret and use fractional {and negative} scale factors for enlargements	<p>Y10H Term 3- Transformations</p> <p>Y10H Term 3- Constructions, loci and bearings</p> <p>Y11H Term 1 - Similarity and congruence in 2D and 3D</p>	<p>Y10F Term 2- Properties of shapes, parallel lines and angle facts, Interior and exterior angles of polygons</p> <p>Y10F Term 3- Transformations</p> <p>Y11F Term 2 - Similarity and congruence in 2D, Vectors</p>
{Describe the changes and invariance achieved by combinations of rotations, reflections and translations}	<p>Y10H Term 3- Transformations</p> <p>Y10H Term 3- Constructions, loci and bearings</p>	
Identify and apply circle definitions and properties, including centre, radius, chord, diameter, circumference, tangent, arc, sector and segment	<p>Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p> <p>Y10H Term 2- Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres</p> <p>Y11H Term 2 - Circle theorems</p> <p>Y11H Term 2 - Circle geometry</p>	<p>Y10F Term 2- Perimeter, area and volume, Circles, cylinders, cones and spheres</p> <p>Y11F Term 1 - Plans and elevations, Constructions, loci and bearings</p>
{Apply and prove the standard circle theorems concerning angles, radii, tangents and chords, and use them to prove related results}	<p>Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p> <p>Y11H Term 2 - Circle theorems</p>	

Construct and interpret plans and elevations of 3D shapes	<p>Y10H Term 2- Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres</p> <p>Y10H Term 3- Constructions, loci and bearings</p>	Y11F Term 1 - Plans and elevations, Constructions, loci and bearings
Interpret and use bearings	Y10H Term 3- Constructions, loci and bearings	Y11F Term 1 - Plans and elevations, Constructions, loci and bearings
Calculate arc lengths, angles and areas of sectors of circles	<p>Y10H Term 2- Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres</p> <p>Y11H Term 1 - Similarity and congruence in 2D and 3D</p>	Y10F Term 2- Perimeter, area and volume, Circles, cylinders, cones and spheres
Calculate surface areas and volumes of spheres, pyramids, cones and composite Solids	Y10H Term 2- Perimeter, area and circles, 3D forms and volume of cones, cylinders and spheres	Y10F Term 2- Perimeter, area and volume, Circles, cylinders, cones and spheres
Apply the concepts of congruence and similarity, including the relationships between lengths, {areas and volumes} in similar figures	Y11H Term 1 - Similarity and congruence in 2D and 3D	Y11F Term 2- Similarity and congruence in 2D, Vectors
Apply Pythagoras' Theorem and trigonometric ratios to find angles and lengths in right-angled triangles {and, where possible, general triangles} in two {and three} dimensional figures	<p>Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry</p> <p>Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry</p>	Y10F Term 3- Right angled triangles, Pythagoras and trigonometry
Know the exact values of $\sin\theta$ and $\cos\theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90° ; know the exact value of $\tan\theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and 60°	Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry	Y10F Term 3- Right angled triangles, Pythagoras and trigonometry

	Y11H Term 2 - Exact trigonometric values	
{Know and apply the sine rule and cosine rule to find unknown lengths and angles}	Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry	
{Know and apply Area = absinC to calculate the area, sides or angles of any triangle}	Y10H Term 2- Polygons, angles and parallel lines, Circle theorems, Pythagoras' theorem and trigonometry Y11H Term 1 - Graphs of trigonometric functions, Further trigonometry	
Describe translations as 2D vectors	Y10H Term 3- Transformations Y10H Term 3- Constructions, loci and bearings	Y10F Term 3- Transformations Y11F Term 2- Similarity and congruence in 2D, Vectors
Apply addition and subtraction of vectors, multiplication of vectors by a scalar, and diagrammatic and column representations of vectors; {use vectors to construct geometric arguments and proofs}	Y10H Term 3- Transformations Y10H Term 3- Constructions, loci and bearings Y11H Term 2- Vectors and geometric proof	Y11F Term 2- Similarity and congruence in 2D, Vectors

Pupils should be taught to: Probability	At St Gregory's Catholic High School, this is taught	
Apply the property that the probabilities of an exhaustive set of mutually exclusive events sum to one	Y10H Term 3- Probability	Y11F Term 1- Probability
Use a probability model to predict the outcomes of future experiments; understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size	Y10H Term 3- Probability	Y11F Term 1- Probability
Calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying Assumptions	Y10H Term 3- Probability	Y11F Term 1- Probability
{Calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams}	Y10H Term 3- Probability	Y11F Term 1- Probability

Pupils should be taught to: Statistics	At St Gregory's Catholic High School, this is taught	
Infer properties of populations or distributions from a sample, whilst knowing the limitations of sampling	Y11H Term 1- Collecting data, Cumulative frequency, box plots and histograms	Y10F Term 1- Statistics, sampling and the averages
Interpret and construct tables and line graphs for time series data	Y10H Term 1- Averages and range, Representing and interpreting data and scatter graphs, Cumulative frequency, boxplots and histograms	Y10F Term 1- Tables, charts and graphs, Pie Charts, Scatter Graphs Y10F Term 1- Statistics, sampling and the averages Y10F Term 1- Fractions, decimals and percentages, Percentages

<p>{Construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use}</p>	<p>Y10H Term 1- Averages and range, Representing and interpreting data and scatter graphs, Cumulative frequency, boxplots and histograms</p> <p>Y11H Term 1- Collecting data, Cumulative frequency, box plots and histograms</p>	
<p>Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through appropriate graphical representation involving discrete, continuous and grouped data, {including box plots}, appropriate measures of central tendency (including modal class) and spread {including quartiles and inter-quartile range}</p>	<p>Y10H Term 1- Averages and range, Representing and interpreting data and scatter graphs, Cumulative frequency, boxplots and histograms</p> <p>Y11H Term 1- Collecting data, Cumulative frequency, box plots and histograms</p>	<p>Y10F Term 1- Tables, charts and graphs, Pie Charts, Scatter Graphs</p> <p>Y10F Term 1- Statistics, sampling and the averages</p>
<p>Apply statistics to describe a population</p>	<p>Y10H Term 1- Averages and range, Representing and interpreting data and scatter graphs, Cumulative frequency, boxplots and histograms</p> <p>Y11H Term 1- Collecting data, Cumulative frequency, box plots and histograms</p>	<p>Y10F Term 1- Tables, charts and graphs, Pie Charts, Scatter Graphs</p>
<p>Use and interpret scatter graphs of bivariate data; recognise correlation and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent trends whilst knowing the dangers of so doing</p>	<p>Y10H Term 1- Averages and range, Representing and interpreting data and scatter graphs, Cumulative frequency, boxplots and histograms</p>	<p>Y10F Term 1- Tables, charts and graphs, Pie Charts, Scatter Graphs</p>