Mathematics

Curriculum Overview

At Dixons Kings we develop students to lead successful and happy lives and make a positive contribution to their community. Our curriculum in each year is designed to provide experiences, opportunities, knowledge and skills that enrich and challenge our students. We understand that the curriculum is key to determining the life chances and choices for our students and therefore we will not compromise on providing the very best. We achieve this in Mathematics through the below:

Knowledge, skills and understanding to be gained at each stage:

		Cycle 1	Cycle 2	Cycle 3
Year 7	Knowledge Introduced	Number 1 and Negatives 1 Significant figures and estimation; order of operations with negative numbers, powers and roots; prime factor decomposition	Fractions 1, Statistics 1 and Algebra 1 Fractions with different denominators; multiply and divide fractions; averages from frequency tables; index laws; nth term	Percentages 1 and Geometry 1 Use multipliers; reverse percentages; compound interest and depreciation; angle rules in parallel lines; naming parts of a circle; interior and exterior angles of polygons
	Knowledge Revisited	Place value; metric units; area and perimeter; order of operations (BIDMAS); inequality notation; formal methods of the four operations, including number lines; prime, square and cube numbers; HCF/LCM; retrieval of key formulae from knowledge navigator	Simplify and order fractions; mixed numbers and improper fractions; add and subtract fractions with the same denominator; FDP equivalence; substitution; sequences; retrieval of key formulae from knowledge navigator	Percentages of amounts; percentage increase and decrease; 2D shapes; basic angle facts; retrieval of key formulae from knowledge navigator
	Skills Introduced	Use inequality notation; round to significant figures; use approximation through rounding to estimate calculations; multiply and divide decimals and negative numbers; application of the four operations with area and perimeter including converting metric units; prime factor decomposition; finding HCF/LCM using Venn diagrams	Simplify, compare and order fractions using inequality notation; add, subtract, multiply and divide fractions with different denominators; convert between fractions, decimals and percentages; find fractions of amounts Use the four averages fluently - mode, mean, median and range, including from frequency tables; draw and interpret charts and graphs Simplify algebraic expressions; apply index laws to algebraic terms; expand and factorise expressions; substitute into expressions and formulae; form and solve equations including area and perimeter; generate sequences; find the nth term of sequences	Use efficient methods to find percentages of amounts with and without a calculator; percentage increase and decrease using a multiplier; reverse percentages Identify 2D properties including parts of a circle; use a protractor to accurately measure and construct angles; find missing angles on a straight line, around a point, in triangles and quadrilaterals; find missing angles in parallel lines; find interior and exterior angles in polygons
	Skills Revisited	Order integers, decimals and negative numbers; round to powers of 10 and decimal places; add and subtract with negative numbers	Applying order of operations; rounding to decimal places and significant figures; converting metric units; prime factor decomposition; HCF/LCM from Venn diagrams	Operations with fractions; convert between mixed numbers and improper fractions; find averages from a list and from frequency tables; apply index laws; substitution; work with sequences
Year 8	Knowledge Introduced	Fractions 2, Percentages 2, Geometry 2 and Algebra 2 Area of trapezia and compound shapes; area of a circle and circumference; Pythagoras' theorem in multiple contexts; double brackets	Algebra 2 (continued), Ratio and Proportion 1, Geometry 3 and Algebra 3 Substitute into complex formulae; equations with unknowns on both sides; conversion and speed-distance-time graphs; density; volume and surface area; equation of a straight line	Algebra 3 (continued), Statistics 2, Probability 1 and Geometry 4 Quadratic graphs; cumulative frequency; stem and leaf diagrams; scatter graphs; frequency polygons; sample space diagrams; relative frequency; probability from Venn diagrams; transformations; isometric drawings; plans and elevations; constructions and loci
	Knowledge Revisited	Operations with fractions; percentage of amounts; area of rectangles, triangles, parallelograms; Pythagoras' theorem; index laws; collect like terms; form expressions; expand single brackets; retrieval of key formulae from knowledge navigator	Substitution; solve equations; inequalities; simplify ratios; scales; volume of cubes and cuboids; plot a linear graph; retrieval of key formulae from knowledge navigator	Averages from frequency tables; pie charts; basic probability; retrieval of key formulae from knowledge navigator

	Skills Introduced	Fractional increase and decrease; ordering fractions, decimals and percentages; calculate simple and compound interest and depreciation; problem-solve with percentages Convert between area units; calculate area and circumference including compound shapes; apply Pythagoras' theorem to right-angled triangles; use Pythagoras' theorem in 3D shapes Write numbers in standard form; expand double brackets	Solve equations with an unknown on both sides; solve simultaneous equations Change the subject of a formula; solve inequalities Simplify ratios; share in a ratio; practical applications of ratio in recipe, exchange rate and best buy problems Draw and interpret conversion graphs; draw straight line graphs; calculate gradient; find the equation of a line Calculate the volume and surface area of 3D shapes	Identify parallel lines; draw quadratic graphs Draw and interpret cumulative frequency graphs; draw and interpret stem and leaf diagrams; construct and interpret pie charts and scatter graphs Calculate probabilities from sample space diagrams, Venn diagrams and probability trees Identify and describe the four different types of transformations; construct isometric drawings of shapes including plans and elevations; use a compass and ruler to complete constructions including angle and perpendicular bisectors; construct the locus of a point, a line segment and of a shape
	Skills Revisited	Calculate percentages of amounts; work with reverse percentages; find missing angles in parallel lines and polygons	Calculate simple and compound interest; use Pythagoras' theorem; find area of 2D shapes; work with standard form; expand double brackets	Solve equations; change the subject; work with ratio; straight line graphs
Year 9 Higher	**Knowledge Introduced**	Unit 1 - Number and Unit 2 - Algebra Related calculations; product rule for counting; estimation; advanced index laws; calculations with standard form, surds; factorise challenging quadratic expressions; difference of two squares; algebraic proof; quadratic sequences; arithmetic and geometric progression	Unit 3 - Data and Averages, Unit 4 - Fractions, Percentages and Ratio and Proportion Averages from frequency tables; combined data sets; frequency polygons; time-series graphs; calculations with algebraic fractions; repeated percentage increase and decrease; problem-solving with ratio; angles in polygons using algebra; applied Pythagoras' theorem and trigonometry	Unit 5a - Polygons and Angles, Unit 5b - Pythagoras and Trigonometry, Unit 6 - Straight line graphs, Unit 7 - Perimeter, Area and 3D Shapes Exact trigonometric values; distance-time graphs; velocity-time graphs; equation of straight line graphs including parallel and perpendicular lines; solutions from quadratic graphs; cubic, reciprocal, exponential and circle graphs; area of a sector and arc length; volume and surface area of prisms, cylinders, pyramids, cones, spheres and frustums; upper and lower bounds; error intervals; truncation
	Knowledge Revisited	Review of key algebra, number, statistics and geometry topics from the Year 8 SOW; retrieval of key formulae from knowledge navigator	Review of units 1a, 1b, 1c, 1d and 2a from Year 9 Cycle 1; retrieval of key formulae from knowledge navigator	Review of units 3, 4a, 4b and 4c from Year 9 Cycle 2; retrieval of key formulae from knowledge navigator
	Skills Introduced	Use the product rule for counting; estimate answers to multi-step calculations, including rounding pi; recognise and use square, cube and prime numbers; solve algebraic problems using multiple index laws; add, subtract, multiply and divide in standard form, adjusting answers where necessary; simplify, add and subtract, multiply and divide and expand brackets with surds; rationalise the denominator Factorise quadratic expressions with a coefficient of $a > 1$; find the nth term of quadratic sequences; recognise and use simple geometric progressions; continue geometric progressions and find the term-to-term rule including negative, fractional and decimal terms	Calculate the mean, median, range and mode from grouped and ungrouped frequency tables; work with combined data sets in order to calculate missing information; interpret and plot frequency polygons; plot and interpret time-series graphs; draw and interpret histograms of equal class widths Calculate repeated percentage increase and decrease and repeated percentage change; use the four operations with algebraic fractions; convert between fractions and recurring decimals; order recurring decimals; direct proportion; solve complex multi-step problems with ratio Apply knowledge of interior and exterior angles in polygons to algebraic problems; use trigonometry to calculate missing angles and lengths in right-angled triangles; calculate angles of elevation and depression; apply Pythagoras' theorem and trigonometry to multi-step problems	Derive, recall and be able to use exact trigonometric values Plot and interpret distance-time graphs; plot and interpret velocity-time graphs; find the equation of parallel lines given the equation of a different line, gradient or two points; find the equation of perpendicular lines given the equation of a different line, gradient or two points; work with quadratic graphs in order to find roots and solve related quadratic equations; recognise and plot cubic, exponential, reciprocal and circle graphs; Calculate arc length and sector area and find missing lengths given arc length and sector area; find the surface area of prisms, cylinders, pyramids, cones, frustums and spheres; find the volume of prisms, cylinders, pyramids, cones, frustums and spheres; calculate upper and lower bounds; truncate a number; write down error intervals; problem-solve with bounds

	Skills Revisited	Operations with integers and decimals; related calculations; round to decimals places and significant figures; estimation; identify types of number; use BIDMAS; apply index laws; prime factor decomposition; find the HCF/LCM; convert between standard form and ordinary numbers Collect like terms; substitute positive and negative numbers into formula; simplify expressions; expand single and double brackets; form and solve equations; generate sequences; find the nth term of a sequence	Design and use two-way tables; draw and interpret stem and leaf diagrams; construct and interpret bar charts, line graphs and pie charts; draw and interpret scatter graphs including describing correlation, identifying outliers and using line of best fit FDP equivalence; find fractions of amounts; simplify fractions; convert between improper fractions and mixed numbers; operations with fractions; percentage increase and decrease; use multipliers; calculate percentage change; use reverse percentages; work with compound interest and depreciation; simplify ratios; share in a ratio; apply knowledge of ratio to recipe, scale, best value and currency problems Recall and use basic angle facts; calculate interior and exterior angles in polygons; find missing angles in parallel lines; find missing lengths in right-angled triangles using Pythagoras' theorem	Use the general equation of a straight line to solve problems with linear graphs; plot straight line graphs; find the area and perimeter of 2D shapes; find the volume and surface area of basic 3D shapes; rounding to decimal places and significant figures
Year 9 Foundation	**Knowledge Introduced**	Unit 1 - Number and Unit 2 - Algebra Related calculations; index laws with number and algebra; quadratic expressions; substitution with complex formula	Unit 3 - Tables and Charts and Unit 4 - Fractions, Decimals and Percentages Two-way tables; frequency trees; dual bar charts; real-life percentage problems	Unit 5 - Equations, Inequalities and Sequences, Unit 6 - Properties of Shapes, Parallel Lines and Angle Facts and Unit 7 - Averages Three-part inequalities; quadratic sequences; parallel and perpendicular lines; angles in parallel lines and polygons; reverse mean; averages from grouped data
	Knowledge Revisited	Review of key algebra, number, statistics and geometry topics from the Year 8 SOW; retrieval of key formulae from knowledge navigator	Review of units 1a, 1b, 1c, 1d, 2a and 2b from Year 9 Cycle 1; retrieval of key formulae from knowledge navigator	Review of units 2c, 3a, 3b, 3c, 3d, 4a, 4b and 4c from Year 9 Cycle 2; retrieval of key formulae from knowledge navigator
	Skills Introduced	Use one calculation to solve a related calculation; use the laws of indices to multiple and divide numbers written in index form; raise brackets to powers in algebraic and numerical terms; solve simple problems using prime factors and HCF/LCM Factorise linear and quadratic expressions; substitute positive and negative values into complex formulae	Draw and interpret two-way tables, including identifying probabilities; draw and interpret frequency trees, including identifying probabilities; plot and interpret dual bar charts; draw and interpret back-to-back stem and leaf diagrams	Show and solve three-part inequalities; continue a quadratic sequence and use the nth term to generate terms; identify and use the properties of parallel and perpendicular lines in 2D shapes; find missing information given the mean of a list of data; calculate the mean and median from grouped frequency tables.
	Skills Revisited	Round decimals and integers to any given number of significant figures; estimate answers to calculations; use BIDMAS; find the HCF/LCM using prime factor decomposition Form expressions; collect like terms; use index notation and laws; expand single and double brackets; substitution	Calculate averages from a list and ungrouped frequency tables; plot and read coordinates; pictograms, bar charts and line graphs; draw and interpret stem and leaf diagrams, scatter graphs and pie charts Simplify, compare and order fractions; convert between mixed numbers and improper fractions; operations with fractions including mixed numbers; FDP equivalence; find percentages of amounts; work with percentage increase and decrease; calculate the original amount using reverse percentages; calculate simple and compound interest and depreciation	Solve equations including with unknowns on both sides and fractional parts; form and solve equations with angles and perimeter; represent inequalities on a number line; solve inequalities; find missing terms in a sequence; find the nth term Estimate and measure angles; recall and use basic angle theories; find missing angles in triangles and quadrilaterals; recall and use angle theories in parallel lines; calculate interior and exterior angles
Year 10 Higher	**Knowledge Introduced**	Unit 8a - Transformations and Unit 9 - Quadratic Equations and Inequalities and Unit 10 - Probability Simultaneous equations; transformations negative and fractional enlargement; invariance Solve quadratic equations by factorising; the quadratic formula; completing the square Relative and expected frequency; frequency trees; probability trees including conditional; set theory notation	Unit 12 - Data, Unit 13 - Similarity and Congruence, Unit 14 - Multiplicative Reasoning and Unit 15 - Further Trigonometry Box plots and cumulative frequency; histograms with unequal class widths; compare distributions of data; mean and median from a histogram Similar shapes; area and volume of similar shapes; congruence Convert between units of length, area and volume; compound measures; algebraic direct and inverse proportion; work rate problems Sine rule, cosine rule and area of non-right-angled triangles; 3D trigonometry and 3D Pythagoras' theorem	Unit 8b - Constructions and Loci, Unit 17 - Rationalising, Algebraic Fractions and Complex Rearranging and Unit 18 - Quadratics and Graphs Constructions and loci; bearings; rationalising the denominator; simplifying algebraic fractions; operations with algebraic fractions; quadratic graphs; expand more than two brackets; quadratic simultaneous equations; graphing linear and quadratic inequalities

	Knowledge Revisited	Review of units 5, 6 and 7 from Year 9 Cycle 3; retrieval of key formulae from knowledge navigator	Review of units 9 and 10 from Year 10 Cycle 1; retrieval of key formulae from knowledge navigator	Review of units 12, 13, 14 and 15 from Year 10 Cycle 2; retrieval of key formulae from knowledge navigator
	Skills Introduced	Solve simultaneous equations with and without rearranging; perform and describe all four transformations - translation, rotation, enlargement and reflection; describe combined transformation; complete and describe negative and fractional enlargement; understand and identify invariance Use the quadratic formula to solve quadratic equations, with and without rearranging; solve quadratic equations by factorising; solve quadratic equations by completing the square Calculate relative and expected frequency; use probability trees to find conditional probability; use set theory notation; construct and interpret Venn diagrams to calculate probability	Construct and interpret a cumulative frequency graph; construct and interpret a box plot; find the median, lower and upper quartiles from a list, box plot and cumulative frequency graph; compare distributions; construct and interpret histograms with unequal widths; find an estimate for the mean and median from a histogram Find linear, area and volume scale factors of 2D and 3D shapes; solve problems relating to similar shapes; understand and explain congruence; apply knowledge of similarity and congruence to solve related problems Convert between units of length, area and volume; work with speed, density and pressure; solve problems with algebraic direct and inverse proportion; apply knowledge of proportion to worded problems including work rate Recall and use sine rule and cosine rule to calculate missing lengths and angles; find the area of non-right angled triangles; apply Pythagoras' theorem and trigonometry to find missing lengths and angles in 3D shapes	Understand and draw bearings; construct a perpendicular from a point to a line and from a point on a line; apply knowledge of loci to complex problems Rationalise the denominator; add, subtract, multiply and divide algebraic fractions; change the subject of a complex formula by factorising Sketch a quadratic graph by factorising, completing the square or by using the quadratic formula; identify roots, turning point and intercepts of quadratic functions; expand triple brackets; sketch a cubic graphs; solve quadratic simultaneous equations graphically and algebraically; solve quadratic inequalities; solve inequalities graphically
	Skills Revisited	Rearrange and solve equations Complete basic transformations Factorise quadratic equations Basic probability; use probability tables; construct and interpret two way tables; complete and use probability trees; construct a Venn diagram	Convert units of length and area; work with compound measures Use Pythagoras' theorem and trigonometry to calculate missing lengths and angles in right-angled triangles	Draw plans and elevations of 3D shapes; construct triangles using compasses and protractor; construct angle and perpendicular bisectors; construct loci of a point, line and shape Simplify surds; expand brackets with surds; simplify algebraic fractions; change the subject Factorise a quadratic expression; use the quadratic formula; complete the square in order to identify a turning point
Year 10 Foundation	**Knowledge Introduced**	Unit 8 - Perimeter, Area and Volume, Unit 9 - Graphs and Unit 10 - Transformations	Unit 11 - Ratio and Proportion, Unit 12 - Pythagoras' Theorem and Trigonometry, Unit 13 - Probability, Unit 14 - Multiplicative Reasoning and Unit 15a - Plans and Elevations	Unit 15b - Constructions and Loci, Unit 16 - Quadratic Equations, Unit 17 - Perimeter, Area and Volume 2, Unit 18 - Fractions and Indices .
	Knowledge Revisited	Review of units 5, 6 and 7 from Year 9 Cycle 3; retrieval of key formulae from knowledge navigator	Review of units 8, 9 and 10 from Year 10 Cycle 1; retrieval of key formulae from knowledge navigator	Review of units 11, 12, 13 and 14 from Year 10 Cycle 2; retrieval of key formulae from knowledge navigator
	Skills Introduced	Find the area of 2D shapes including trapezia and parallelograms; find the surface area and volume of prisms, cubes and cuboids; convert measures area and volume; find the coordinates of the midpoint of a line segment Draw and interpret distance-time graphs and real-life graphs; find the equation of a straight line from a graph and through given points; identify parallel lines Complete transformation of shapes - translation, rotation, reflection and enlargement; describe transformations	Solve worded problems involving direct and inverse proportion; solve proportion problems using the unitary method Apply Pythagoras' theorem to triangles on a coordinate grid; calculate the length of a line segment; use trigonometry to find missing angles and lengths in right-angled triangles; find angles of elevation and depression Find missing probabilities from a list or table including algebraic terms; work out probabilities from frequency trees and two-way tables; understand and apply set theory notation; find probabilities from Venn diagrams. Solve calculations involving repeated percentage change; work with compound measures - speed, density and pressure; set up, solve and interpret growth and decay problems; Interpret equations that describe direct and inverse proportion	Solve loci problems including bearings Factorise a quadratic expression using the difference of two squares; solve quadratic equations by factorising; find the roots of a quadratic function algebraically; plot quadratic graphs; identify the line of symmetry, roots, intercepts and turning points of quadratic graphs; find approximate solutions to quadratic functions from real-life problems Calculate arc length and area of a sector; find the surface area and volume of a cylinder, sphere, pyramid, cone and composite solids Understand reciprocals; apply index laws to algebraic and numerical terms; apply laws of fractional and negative indices

	Skills Revisited	Find the area of basic 2D shapes; convert metric units of length; find and plot coordinates Plot linear graphs	Write and simplify a ratio; share in a ratio; compare ratios; apply knowledge of ratio to problems involving recipes, best value and scales Find the missing length of a right-angled triangle using Pythagoras' theorem Use the probability scale; list events in a systematic way; use and interpret sample space diagrams and probability tables; construct and interpret probability trees Calculate percentages of amounts with and without a multiplier; express an amount as a percentage; calculate percentage change and reverse percentages; work with exchange rates; work with compound interest and depreciation Construct isometric drawings from 3D shapes; understand and draw plans and elevations; accurately measure and construct angles	Construct angle and perpendicular bisectors; construct locus of a point, line and object Expand brackets; factorise linear and quadratic expressions Find the perimeter of 2D shapes; identify parts of a circle; calculate area of a circle and circumference; find the volume and surface area of simple solids Operations with fractions; convert between mixed numbers and improper fractions; apply index laws
Year 11 Higher	**Knowledge Introduced**	Bounds, inequalities, solving quadratics, algebraic probability, types of graphs, algebraic fractions, surds, functions, graph transformations, rearranging formulae and sequences.	Histograms, proportion, complex ratio, similar shapes, algebraic proof, circle theorems, iteration, sine and cosine rule and 3-D trigonometry, 3-D pythagoras' and vectors.	Transformations, percentages and exam paper practice.
	Knowledge Revisited	Recalling formulae and review of unit 1c, 4a, 4c, 2a, 2b, 3a, 7a, 7b and 10 from the Key Stage 4 two-year SOW	Recalling formulae and review of 2c, 9a, 5a, 6b, 1d, 7c, and 10 from the Key Stage 4 two-year SOW	Recalling formulae and review of unit 12, 13, 14, 15 and 17 from the Key Stage 4 two-year SOW
	Skills Introduced	Write down error intervals and apply bounds to area, perimeter, volume and surface area problems. Solve quadratic inequalities including graphically. Complete the square and apply the quadratic formulae. Identify and draw exponential and circle graphs. Use algebra to solve complex probability problems. Solve and simplify algebraic fractions with all four operations. Understand and apply function notation including composite and inverse functions. Apply function notation to graph transformations. Rearrange complex formula involving unknowns on both sides with fractional parts. Find the nth term of quadratic and geometric sequences.	Draw and interpret histograms including estimating the median. Solve algebraic problems involving direct and inverse proportion. Solve complex ratio problems involving percentages and fractions. Form algebraic expressions to prove a given statement or expression. Apply and learn circle theorems including proofs. Understand iteration notation and use a calculator to find an approximate solution. Apply Pythagoras' Theorem and trigonometry to 3-D shapes. Apply sine and cosine rule. Understand vector notation including column vectors and apply this to proof problems.	Describe and complete combined transformations. Calculate reverse percentages, compound percentages including depreciation and complex repeated percentage change. Exam skill techniques and methods.
	Skills Revisited	Recalling formulae and review of unit 1c, 4a, 4c, 2a, 2b, 3a, 7a, 7b and 10 from the Key Stage 4 two-year SOW	Recalling formulae and review of 2c, 9a, 5a, 6b, 1d, 7c, and 10 from the Key Stage 4 two-year SOW	Recalling formulae and review of unit 12, 13, 14, 15 and 17 from the Key Stage 4 two-year SOW
Year 11	**Knowledge Introduced**	Standard form, bounds, expanding, factorising, inequalities, transformations, graphs, tables, sequences, angles, ratio, proportion and compound measures.	Averages, rearranging, percentages, linear, quadratic and cubic graphs, area, perimeter including circles, volume, surface area, probability, bearings, Pythagoras' theorem and trigonometry.	Equation of a line, similar shapes, vectors, constructions, loci, simultaneous equations, fractional and negative indices and exam paper practice.
	Knowledge Revisited	Recalling formulae and review of Unit 1, 2, 3 and 4 from the Key Stage 4 two-year SOW.	Recalling formulae and review of unit 5, 6, 7 and 8 from the Key Stage 4 two-year SOW.	Recalling formulae and review of unit 11, 12, 16 and 17 from the Key Stage 4 two-year SOW.

Skills Introduced	Write small and large numbers in standard form. Apply the four operations to numbers in standard form and use a calculator to complete calculations with standard form Write down an error intervals and calculate upper and lower bounds including simple application problems. Expand and factorise quadratics. Solve equations including equations with fractional parts. Represent an inequality on a number line and solve inequalities. Find the nth term of a linear sequence. Find missing angles in parallel lines and polygons. Complete contextual problem with ratio and proportion.	Calculate averages from tables and frequency polygons. Rearrange formulae and substitute into expressions. Draw and interpret linear, quadratic and cubic graphs. Calculate the arc length and area of a sector. Calculate the volume and surface area of 3-D shapes. Draw and interpret probability trees for independent and conditional events. Understand set theory notation and find probabilities from Venn diagrams. Construct and read bearings. Apply Pythagoras' theorem and trigonometry to right-angled triangles.	Identify the equation of a line from a graph including parallel and perpendicular lines. Find missing lengths of similar shapes and understand the area and volume scale factors. Understand column vector notation and draw a column vector on a grid. Write down simple vectors for geometric problems. Solve simultaneous equations by elimination method. Evaluate fractional and negative indices. Exam skill techniques and methods.
Skills Revisited	Recalling formulae and review of Unit 1, 2, 3 and 4 from the Key Stage 4 two-year SOW.	Recalling formulae and review of unit 5, 6, 7 and 8 from the Key Stage 4 two-year SOW.	Recalling formulae and review of unit 11, 12, 16 and 17 from the Key Stage 4 two-year SOW.

A powerful, knowledge-rich curriculum teaches both declarative knowledge (facts; knowing that something is the case; what we think about) and non-declarative or procedural knowledge (skills and processes; knowing how to do something; what we think with). There are no skills without bodies of knowledge to underpin them. In some subjects, a further distinction can be made between substantive knowledge (the domain specific knowledge accrued e.g. knowledge of the past) and disciplinary knowledge (how the knowledge is accrued e.g. historical reasoning). Please refer to the DAT Curriculum Principles, published on our website, for further information about how we have designed our curriculum.