Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Number Strand						
Number systems and place value	• Egyptian • Ancient Greek • Roman • Mayan • Chinese-Japanese					
	The Hindu-Arabic number system, up to 100 000's	Define: • whole number • natural number • place value (up to 10 million)	Performing operations with numbers in different bases			
	Big numbers					
Operations with whole numbers	Use "columns" for addition & subtraction (up to 5 digits) Introduce "sum" and "difference"	Use number strategies for addition & subtraction Use "sum" and "difference"			Review operations with whole numbers (Background Knowledge)	
	Multiply and divide by powers of 10 Use columns to multiply (up to 3x2 digits), Use columns to divide (including remainder) Introduce "product" and "quotient"	Use number strategies for multiplication and division Use "product" and "quotient"				
	Two step problem solving					
	Order of operations • only one set of brackets • no fraction lines	Order of operations - two sets of brackets Negatives Fraction lines	Order of operations - calculator use			
	Introduce 0 and 1 , multiplication & division by 0.		Absolute value of a number			

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Negative numbers	• Opposites • Combined effects • Placing negatives on number line • Order numbers	• Use number line to perform additions & subtractions where answer may be negative. • Use patterns to explain $+, -, \times, \div$ of negative numbers. • Order of operations				
	Adding and subtracting negatives using number lines, Freddy the Frog		Review rules for addition and subtraction of negatives			
	Multiplying and dividing negatives using Freddy the Frog		Review rules for multiplication and division of negatives			
		• Introduce negative fractions as division • Place negative fractions on number line	• Negative fractions on number line • Operations with negative fractions (simplify $+, -, \times, \div$)			
			Negative decimals on number line			
Fractions	Introducing "numerator", "denominator". Use shapes to describe fractions	Use shapes to describe fractions	Review: • fractional simplifying • operations with fractions, including with negative fractions		Review operations with fractions (Background Knowledge)	
	Write fractions as division, and as whole numbers	Write positive and negative fractions as division, and whole numbers				
	Converting between improper fractions & mixed numbers	Converting between improper fractions & mixed numbers				
	Placing fractions on a number line. Use number line to order fractions.	Placing positive and negative fractions on a number line				
	Finding fractions of quantities by division (i.e. $\frac{1}{3}$ of 24 = $\frac{24}{3}$)	Finding fractions of quantities by multiplication (i.e. $\frac{1}{3}$ of 24 = $\frac{1}{3} \times 24$)				
	Equal fractions and simplest form using shapes Use to compare fractions	Equal fractions and simplest form using fraction wall Use to compare fractions Express one quantity as a fraction of another				
	Add and subtract fractions, including mixed numbers • same denominator • related denominators (one is a multiple of the other)	Add and subtract fractions, including unrelated denominators				
		Multiply and divide positive fractions, including mixed numbers				

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Decimals	• Place value (up to thousandths) • Convert between words and number form	Place value (up to thousandths)	Review: • Decimals • Rounding with decimals, including to significant figures, • Conversion between fractions and decimals • Add & subtract decimals • Multiply and divide decimals		Review decimals (Background Knowledge)	
	Placing decimals on number line, where number line is given. Ordering	Placing decimals on number line, including drawing the number line. Ordering				
	Rounding to a number of decimal places (up to 3), or nearest whole number	Rounding to a number of decimal places (up to 4d.p.), or nearest whole number Evaluate 3/14 on calc, round to 1 d.p.				
	Converting between fractions and decimals (up to 3 d.p.)	Converting between fractions and decimals (up to 5 d.p.)				
	Using columns to add and subtract decimals (up to 3 d.p.)	Using columns to add and subtract decimals (up to 4 d.p.)				
	Multiply and divide decimals by powers of 10	Multiply and divide decimals by powers of 10 using fractions				
	Multiply decimals by whole numbers, using "equal decimal places in question & answer"	Multiply two decimal numbers by multiplying whole numbers, then dividing by power of 10				
	Divide decimals by whole numbers	Divide decimals by whole numbers and other decimals				
			Terminating and recurring decimals			
Percentage	Understanding percentages	Understanding percentages			Review percentage (Background Knowledge)	
	Convert between percentages and fractions using a fraction with denominator 100 • Only fractions with denominator factor/multiple of 100	Convert fraction to percentage by multiplying by 100% Convert percentage to fraction by dividing by 100%	Converting between fractions and percentages by multiplying/dividing by 100%			

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
	Convert between percentages and decimals by multiplying/dividing by 100% • No percentages > 100% • Percentages to 1d.p, decimals to 3d.p. Placing values on a number line	Convert between percentages and decimals by multiplying/dividing by 100% • Percentages up to 3d.p., decimals to 5 d.p.	Review conversion between percentages and decimals			
	Expressing one quantity as a percentage of another • Denominator must be factor/multiple of 100)	Expressing one quantity as a percentage of another	Expressing one quantity as a percentage of another			
	Finding percentages of quantities • Integer percentages	Finding percentages of quantities, including fractional/decimal percentages	Finding percentages of quantities The unitary method in percentage			
		• Percentage increase & decrease using two steps or multiplier. • Finding percentage change.	• Percentage increase & decrease using two steps or the multiplier. • Finding percentage change Finding the original amount			
			Simple interest - calculate interest given principal, rate, time period			
Exponents	Index notation with numbers	• Index notation with numbers • Write numbers in index form, including as product of primes	Write numbers in index form, including as product of primes	Index notation with negative bases		
	Squares and cubes	Squares and cubes Square roots and cube roots - integer result	Square and cube roots, including irrational roots using calculator			
			• Index laws • Expansion laws • Zero and negative indices	Index laws Rational indices (1/n)	Review index laws Rational indices (1/n, m/n)	Review index laws Rational indices (1/n, m/n)
				Scientific notation (standard form)	Scientific notation	Scientific notation
Radicals			• Radicals & surds • Rules for square roots • Simplest form	• Radicals & surds • Simplifying radicals • Operations with radicals • Division by sqrt(a), a+srt(b))	• Properties of radicals • Operations with radicals • Division by a+bsqrt(c), sqrt(a)+sqrt(b)	• Properties of radicals • Operations with radicals • Division by a+bsqrt(c), sqrt(a)+sqrt(b) • Equality of surds

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Sets & logic	- Sets - Elements - Notation - Equal sets - Subsets - Null set		- Sets - Elements - Null set - Subset - Complement	- Disjoint sets - Special number sets Complement	- Set notation - Important number sets - Subsets	Review: - set notation - special number sets
	Intersection & union		Intersection & union	Intersection & union	Review Intersection & union	Review intersection & union
	- Venn diagrams - Shading regions - Simple problem solving		- Venn diagrams - Problem solving	- Venn diagrams - Shaded regions - Problem solving (up to 3 sets) Probabilities with Venn diagrams, including conditional questions	Venn diagrams Shaded regions Problem solving (up to 3 sets)	- Venn diagrams - Shaded regions Problem solving (up to 3 sets)
				Interval notation	Interval notation	Interval notation
					- Algebra of sets - Commutative - Associative - Distributive Use Venn diagrams to prove identities	- Algebra of sets - Commutative - Associative - Distributive - Use Venn diagrams to prove identities
				Logic, propositions, compound statements, truth tables (Online)		
Number properties	- Divisibility - Even & odd - Divisibility tests for 2,3,4,5,6,10	Divisibility Divisibility tests for 2,3,4,5,6,9,10,11				
	Factors of numbers - Determine whether 3 is a factor of 27 - List factors of 30 - Factor pairs - Writing numbers as product of prime factors	Factors of numbers (listing factors, factor pairs) Finding highest common factor of 2 numbers by listing factors	- Review factors - Find HCF of 2 numbers using its prime factor composition			
	Multiples of numbers	Multiples Finding the LCM of 2 numbers by listing multiples	- Review multiples - Find LCM of 2 or 3 numbers using their prime factor composition			
	Define prime and composite numbers Write numbers as the product of prime factors	Use repeated division to write numbers as the product of prime factors	- Review prime & composite numbers - Use repeated division to write numbers as the product of prime factors			

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Number lines	Placing natural numbers on a number line, performing operations					
	Placing negative numbers on a number line Perform operations	Placing negative numbers on a number line, perform operations	Integers on a number line			
	Placing fractions on a number line	Placing positive & negative fractions on a number line	Review fractions on a number line			
	Placing decimals on a number line	Placing decimals on a number line; use for ordering	Placing positive & negative decimals on a number line			
Rounding & estimation	Round whole numbers to powers of 10	Round whole numbers to powers of 10 & significant figures			Review rounding & estimation (Background Knowledge)	
	Round decimal numbers up to 3 d.p.	Round decimal numbers up to 4 d.p.	Rounding decimal numbers to decimal places and significant figures			
		Estimating whole number calculations using one figure rounding				
Financial mathematics		Percentage profit & loss, discount Exchange rates		Business calculations (percentage mark-up & discount, appreciation & depreciation)		
			Simple interest (calculate interest given principal, rate, time period)	Simple interest, including from date->date, calculate monthly repayments		
				Compound interest		Compound interest, including rearrangement, & depreciation

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Ratio, Rates, & Proportion		Two-part ratios, whole numbers only: • Simplest form • Equal ratios • Problem solving • Using ratios to divide quantities	Two and three-part ratios, including fractions & decimals: • Equal ratios • Proportions • Problem solving			
	Scale diagrams	Scale diagrams using ratio notation				
		Calculating rates, comparing prices Rates, speed, line graphs , density, converting rates, exchange rates				
				Direct and inverse proportion		
Number sequences			Number sequences (completing the sequence, predicting the next term, find rule given a sequence)		Number sequences, arithmetic & geometric sequences sums of arithmetic and geometric series	Number sequences, recurrence relations, arithmetic & geometric sequences Sums of arithmetic and geometric series
Logarithms						• Evaluating logarithms • Simplifying expressions • Solving exponential equations • Logs in different bases
Networks			Network diagrams, constructing networks, precedence networks, counting pathways (Online)			
Algebra Strand						

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Algebraic expressions		• Building expressions • Collecting like terms • Product & index notation • Evaluating expressions, including negative substitutions	• Review product notation • Key words • Collecting like terms Generalising arithmetic Evaluating expressions Converting words into equations	• Review notation • Evaluating expressions • Collecting like terms		
		Simple algebraic products	Simplifying algebraic products and quotients (before index laws) Basic algebraic fractions	Algebraic products, including sums & differences of products Simplifying and operations with algebraic fractions	Algebraic products (largely covered in index laws) Algebraic fractions, adding & subtracting with variable denominators	Algebraic products (in index laws) Algebraic fractions, adding & subtracting with variable denominators
Expansion		Distributive law	Distributive law • (a+b)(c+d) • Perfect squares • Difference of 2 squares	• Distributive law • (a+b)(c+d) • Difference of two squares • Perfect squares • Further expansion	Review expansion laws	Review expansion laws, binomial expansion
Factorisation		Factorise by identifying the common factor	• Factorising with common factors • D.O.T.S • Perfect squares • Sum and product	• Factorising with common factors • D.O.T.S • Perfect squares • Four terms • Sum and product • Splitting the x-term (a>0)	Revise factorisation, factorisation by splitting the x-term, a>0 or a>0	Revise factorisation, factorisation by splitting the x-term (a>0 or <0)
Formulae			Rules connecting input & output, substituting into formula, using patterns to create formula, practical problems	Formula construction, substitution, rearrangement	Formula construction, substitution, rearrangement, including powers, and variable occurring more than once. Predicting formulae.	Formula construction, substitution, rearrangement, including powers, and variable occurring more than once. Predicting formulae.
Linear functions		Plotting points which lie on a straight line Graphing linear functions using a table of values Vertical & horizontal lines	Linear relationships, plotting graphs of linear functions using a table of values or technology Axes intercepts Graphing functions using gradient & y-intercept, vertical & horizontal lines Finding equation of line given y-intercept & another point (find gradient)	Graph linear functions using gradient & y-intercept Using axes intercepts to graph lines in general form Vertical & Horizontal lines Finding equation of linear graphs in gradient-intercept form using gradient & point or 2 points (substitution) . Including equation of line perpendicular to another line.	Find equation of line in either form by equating gradients Finding equation of a line quickly, perpendicular bisectors	Find equation of line in either form by equating gradients Finding equation of a line quickly, perpendicular bisectors

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
			The equation of a line, points on lines	Equation of a line (gradient-intercept & general), points on lines	Equation of a line (gradient-intercept & general)	Equation of a line (gradient-intercept & general)
Quadratic functions				• Quadratic functions • Finding y given x and vice versa • Graph from table of values • Transformations • Find axes intercepts Sketch graphs using axes intercepts (factorised form) or completing the square (a=1 only) (unfactorised form). Maximum & minimum values of quadratics	• Quadratic functions • Graphs using table of values • Transformations • Completing the square (a=1)(a/=1 extension) Rational & irrational x-intercepts, graph from the axes intercepts. Axis of symmetry, vertex. Quadratic optimisation.	• Quadratic functions • Graphs using table of values • Transformations • Completing the square for any a Rational & irrational x-intercepts, graph from the axes intercepts. Axis of symmetry, vertex. Quadratic optimisation. If determinant <0, graph lies entirely above or below x-axis Sum and product of roots
Exponential functions				• Exponential functions • Graphing exponential functions by plotting points • Growth & decay, using graph to find y given x	• Exponential functions • Graphing exponential functions using transformations • Growth & decay	• Exponential functions • Graphing exponential functions using transformations • Growth & decay
Trigonometric functions					Trigonometric functions using transformations (not horizontal translation)	Trigonometric functions using transformations
Other functions				Rational functions of the form y=k/x	Relations & functions, modulus functions	Relations & functions, composite functions, inverse, modulus functions
						Graphs of circles and ellipses (Online)
Polynomials						Polynomial operations, Remainder theorem, Factor theorem Synthetic division

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Linear equations		Equations, solve by inspection, guess & check. Use at most 2 inverse operations, repeated unknown on LHS Problem solving	Solve by inspection, guess & check. Use at most 3 inverse operations, including negative coefficient of x. Unknown appears on both sides. Problem solving	At most 3 inverse operations, rational equations, including where denominator is an unknown. Using a table	Inspection, at most 3 inverse operations, repeated unknowns, rational equations	Equations involving algebraic fractions, including where "solution" is unacceptable due to a singularity
Quadratic equations			Solving x^2=k Null Factor Law Solve using factorisation: • common factor • D.O.T.S • perfect square • sum & product	Solving x^2=k, Null Factor Law. Factorisation: • common factor • D.O.T.S • perfect square • sum & product • splitting the x-term Completing the square	Review quadratic equations Completing the square with a=1 (a/=1 extension) Quadratic formula	Review quadratic equations Completing the square with a>1 Quadratic formula Consider complex solutions when determinant <0
Exponential equations				Solving exponential equations by equating indices	Solve exponential equations using equating indices	Solving exponential equations by equating indices or by logarithms
Simultaneous equations			• Trial & error • Graphical solution (y= form only) • Equating ys • Substitution (integer coefficients) • Elimination • Problem solving	• Graphical solution, including general form, & technology for non-integer solutions • Substitution (with fractional coefficients) • Elimination • Non-linear equations	• Graphical method • Equating ys • Substitution • Elimination	
Inequalities				Linear inequalities, graph solutions on number line	Linear inequalities Linear programming	Linear inequalities, non-linear inequalities using sign diagrams, interval notation Linear Programming (Online)

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Calculus					• Tangents • Limits • Derivative function • Rules for differentiation • Areas under curves • Integration (Online)	• Tangents • Limits • Derivative function • Rules for differentiation • Areas under curves • Integration
Geometry and Trigonometry Strand						
Points & Lines	Define point, line, parallel & intersecting lines, naming lines.	Review point, line, parallel & intersecting lines, naming lines				
Angles	Angles, degrees, classifying angles by size, protractor use. Naming angles. Angles at a point or on a line. Vertically opposite angles.	Review angle sizes, angles on a point or on a line. Vertically opposite angles. Corresponding, alternate, co-interior angles.	Review angle sizes, vertically opposite angles, corresponding, alternate, co-interior angles			
Construction	Bisecting angles	Constructing right angles, parallel lines, perpendicular bisectors				
Polygons & circles	Define polygon, regular polygon. Triangles, classify by side length. Quadrilaterals: • Parallelogram • Rectangle • Square • Rhombus • Kite • Trapezium Define circle	Define regular, convex polygon. Classify triangles by side length and by angle. Angles of a triangle, exterior angles. Properties of isosceles triangles. Properties of quadrilaterals, angles in a quadrilateral Circles Euler's rule	Angles & exterior angles of triangle. Isosceles triangle properties & converses. Angles of a quadrilateral, special quadrilaterals Angles of an n-gon			
Solids	Define: • Prism • Cube • Pyramid • Cone • Sphere Nets of solids Sketching solids	Solids, nets of solids Drawing rectangular solids, views of solids				
Measurement	Reading scales					

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Length & perimeter	mm, cm, m, km; converting between units	mm, cm, m, km; converting between units. Word problems involving conversion	Length & conversions	Mention lengths & conversions, no questions	Converting units	
	Define perimeter, perimeter of figures with same units	Perimeter of figures with different units Circumference	Perimeter P of figures with lengths involving variables Circumference	Perimeter, circumference, arc length Find unknown lengths given perimeter	Perimeter, circumference , arc length	
Area	Square units, metric area units	Metric area units, including hectare, converting between units	Metric area units, converting between units	Area units, converting between units	Converting units	
	Area of a rectangle, triangle, parallelogram	Area of rectangle, triangle, parallelogram, trapezium Composite shapes Area of a circle	Area of rectangle, triangle, parallelogram, trapezium Area of circle Area of ellipse Composite figures	Area of rectangle, triangle, parallelogram, trapezium, circle, sector	Area of rectangle, triangle, parallelogram, trapezium, circle , sector, ellipse	
Surface area			Surface area of plane figures, cylinder, sphere	Surface area of plane figures, cylinder, sphere, cone	Surface area of plane figures, cylinder, cone, sphere	
Volume	Cubic units, metric units	Metric units, converting between units	Units, converting between units	Converting between units	Converting between units	
	Volume of rectangular prism	Volume of rectangular prism, solids of uniform cross-section Volume of cylinder	Volume of rectangular prism, uniform cross-section, cylinder, tapered solids, sphere	Volume of uniform cross-section solids, tapered solids, sphere, including finding r given volume.	Volume of uniform cross-section solids, tapered solids, sphere	
Capacity		Capacity units, conversion of units, connecting volume & capacity	Capacity units, conversion of units, connecting volume & capacity	Capacity units, conversion of units, connecting volume & capacity	Capacity units, conversion of units, connecting volume & capacity	

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Mass	Mass units, conversions	Mass units, conversions, mass of water				
Time	- Time lines - Units of time - Time calculations 24 hour time - Timetables	- Time units - Time calculations Time zones				
Pythagoras' theorem			Pythagoras' theorem, converse, problem solving 3D problems		Pythagoras' theorem, converse, Pythagorean triples, circle problems, 3D problems	Pythagoras' theorem, converse, Pythagorean triples, circle problems, 3D problems
Deductive geometry				Deductive proofs Midpoint theorem		
Circle geometry				Angle in semi-circle, chords, radius-tangent, tangents from external point (excluding converses)	Angle in semi-circle, chords (including converses), tangents from external point, radius-tangent. Angle at centre, same arc, angle between tangent & chord, proof Cyclic quadrilaterals	Angle in semi-circle, chords (including converses), tangents from external point, radius-tangent. Angle at centre, same arc, angle between tangent & chord, proof Cyclic quadrilaterals
Transformations of figures	Translations, reflections, rotations Enlargements, tessellations	Translations, reflections & line symmetry, rotations & rotational symmetry, combinations of transformations	Enlargements & reductions (as an introduction to similarity)	Transformation geometry - translations, reflections, rotations, enlargements, including on coordinate plane		Transformations, including dilations, of figures and functions
Similarity & congruence			Similar figures, similar triangles (x appears once only), problem solving	Similar triangles (x appears more than once), problem solving Areas & volumes of similar figures	Similar figures, triangles, problem solving, including using Pythagoras, areas & volumes of similar figures, including density & mass, and figures resulting in quadratic equations	Similar figures, triangles, problem solving, including using Pythagoras, areas & volumes of similar figures, including density & mass, and figures resulting in quadratic equations
			Congruent figures, congruent triangles, proving properties of polygons	Congruent triangles, proof using congruence	Congruent figures, triangles proof using congruence (extension)	Congruent figures, triangles, proof using congruence

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Coordinate geometry	Map references, finding points, positive & negative coordinates, directions	Map references, number grids, positive & negative coordinates. Plotting points from a table of values Graphing lines by creating a table of values	Review plotting points			
			Gradient, gradient formula	Gradient, gradient formula Gradients of parallel & perpendicular lines	Gradient, gradient formula Parallel & perpendicular lines Collinear points	Gradient, gradient formula Parallel & perpendicular lines Collinear points
				Distance between 2 points, using distance to classify triangles	Distance between 2 points, find coord. given distance Distance from a point to a line (using simultaneous equations)	Distance between 2 points, find coord. given distance Distance from a point to a line
				Midpoints	Midpoints	Midpoints
						3D coordinate geometry - distance, midpoint
Trigonometry			Using scale diagrams Trig ratios Finding sides & angles, problem solving	Trig ratios Finding sides & angles, problem solving	Trig ratios Finding sides & angles, problem solving	Trig ratios Finding sides & angles, problem solving
				True bearings (introduce, single trip questions)	True bearings (single trip questions)	True bearings (single & double trip questions)
					3D trig Angle between a line & a plane (ex	3D trig, angle between a line & a plane

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Non-right angled trigonometry				The unit quarter-circle and half-circle	Full unit circle	Supplementary angles
				Area of a triangle	Area of a triangle	Area of a triangle
				Sine rule (use diagram to determine ambiguous case)	Sine rule , including 2 possible answers for ambiguous case	Sine rule, including 2 possible answers for ambiguous case
				Cosine rule Problem solving (not bearings)	Cosine rule Problem solving , including bearings	Cosine rule Problem solving, including bearings
Advanced trigonometry						Simplifying trigonometric expressions
					The unit circle, relationship between sin(x) & cos(x), multiples of 30 and 45, trig functions (without horizontal translations)	Radian measure The unit circle, relationship between sin(x) & cos(x), multiples of 30 and 45, trig functions
						Trig equations by graphing or algebraically
						Negative & complementary angle formula. Compound angle formula

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Vectors				Vectors (largely component form, 2D only), representation, length, addition, scalar multiplication, subtraction. Direction of a vector, problem solving (Online)	Vectors in geometric & component form, including 3D. Operations with vectors, parallelism, scalar product. (Online)	Vectors in geometric & component form, including 3D. Operations with vectors, parallelism, scalar product.
Matrices						Introduction, operations with matrices, matrix multiplication, determinant, identity, inverse, simultaneous equations (Online)
Statistics and Probability Strand						
Interpreting data	Line graphs: • Properties • Estimation • Travel graphs Conversion graphs		Line graphs, travel graphs			
			Interpreting tables & graphs			
Data collection	Sample and population	Census and sample, bias in sampling	Census & sample, bias & sample size in sampling	Review types of data		
Categorical data	Organise into tally & frequency table, find the mode. Display using dot plot, column graph, pie chart.	Organise into tally & frequency table, find the mode. Display using dot plot, vertical or horizontal column graph, pie chart	Organise into tally & freq table, find the mode. Display using column graphs or pie chart			
Numerical data	Organise into tally & frequency table, find the mode. Display using dot plot or column graph	Organise into tally & frequency table. Display using dot plot, column graph, stem-and-leaf plot (1 digit stem). Outliers.	Display using dot plot, or column graph. Display grouped data using column graph or stem plot (up to 2 digit stem)	Display using dot plot, column graph, stem plot Distribution of data Display continuous data using a histogram Box-and-whisker plots Cumulative frequency graphs	Display using dot plot, column graph. Describe distribution, outliers. Stem plots. Histograms for continuous data Cumulative data Box-and-whisker plots	Display using dot plot, column graph. Describe distribution, outliers. Histograms for continuous data Cumulative data Box-and-whisker plots

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Measures of centre	Finding the mean	Finding the mean, mode, median	Finding the mean, mode, median, including from a table	Finding the mean and median, estimating the mean of grouped data	Find the mean, median, mode, estimating the mean of grouped data	Finding the mean, median, mode, estimating the mean of grouped data
Measures of spread		Finding the range	Finding the range, including from a table	Find the range, interquartile range	Range, interquartile range	Range, interquartile range Standard deviation Normal distribution
Comparing data		Comparing categorical data with a side-by-side column graph	Comparing numerical data with back-to-back stemplot	Comparing measures of centre & spread Comparing numerical data with side-by-side & back-to-back column graphs, back-to-back stemplots Parallel box-and-whisker plots (horizontal only)	Parallel box-and-whisker plots (horizontal and vertical)	Parallel box-and-whisker plots (horizontal and vertical)
Bivariate statistics					Scatter plots, correlation Finding r and r^2 by hand or by technology Line of best fit by eye & technology	Scatter plots, correlation Finding r and r^2 by hand or by technology Line of best fit by eye & technology
Describing probability	Using words and a number line to describe probability	Using words & number line to describe probability	Probabilities on a number line			
Sample space	List possible outcomes for single stage events	List possible outcomes for multi-stage events	Use lists or grids to describe the sample space	Use lists, grids, or tree diagrams to describe the sample space	Use list, grid, tree diagram, Venn diagram to describe sample space	Use list, grid, tree diagram, Venn diagram to describe sample space
Theoretical probability	Calculate single stage probabilities using P(E)=n(E)/n(U)	Calculate multi-stage probabilities by listing outcomes and using $P(E)$ $= \dfrac{n(E)}{n(U)}$ Complementary events	Single-stage probabilities by listing outcomes Using grids Multiplying probabilities for independent & dependent events	Single-stage probabilities Using grids Multiplying probabilities for independent and dependent events. Probabilities from Venn diagrams, Including conditional questions	Using grids, Venn diagrams Compound events, including tree diagrams	Using grids, Venn diagrams Compound events, including tree diagrams

Topic	MYP 1	MYP 2	MYP 3	MYP 4	MYP 5 (Standard)	MYP 5 (Extended)
Tree diagrams				Using tree diagrams, sampling with and without replacement	Tree diagrams	Tree diagrams
Experimental probability			Experimental probability, probability from tabled data & 2-way tables	Experimental probability, probability from tabled data	Experimental probability Tabled data , 2-way tables	Experimental probability Tabled data, two-way tables
Expectation			Expectation (probabilities given , or require simple calculation (eg dice))	Expectation (more complicated calculation of probabilities)		
Laws of probability					Mutually exclusive, independent events (P(*A* and *B*) = P(*A*) x P(*B*), use with addition law)	Mutually exclusive, independent events (P(*A* and *B*) = P(*A*) x P(*B*), use with addition law) Conditional probability
						Counting and probability (Online)