Curriculum Co	ontent Map	Subject: Year 12 Maths Term 1 Term 2 Term 3										
Mon	th	September	October	November	December	January	February	March	April	May	June	July
		1. Algebraic Expressions	Equations and Inequalities	Straight Line Graphs	Binomial Expansion	1. Trigonometric Ratios	Differentiation	1. Integration	1. Data Collection	Representation of Data	Hypothesis Testing	Variable Acceleration
	ž	2. Quadratics	2. Graphs and Transformations	2. Circles	PURE MATHEMATICS	Trigonometric Identities and Equations	PURE MATHEMATICS	2. Exponentials and Logarithms	Measures of Location and Spread	2. Correlation	STATISTICS	MECHANICS
	of Wo	PURE MATHEMATICS	PURE MATHEMATICS	3. Algebraic Methods		3. Vectors		PURE MATHEMATICS	STATISTICS	3. Probability	2. Modelling Mechanics	2. Algebraic Methods
	Juits			PURE MATHEMATICS		PURE MATHEMATICS				4. Statistical Distributions	3. Constant Acceleration	3. Functions and Graphs
	_									STATISTICS	4. Forces	PURE MATHEMATICS
		"Understand and use the laws of indices	"Solve simultaneous equations in two	"Understand and use the equation of a	"Understand and use the binomial expansion	1 & 2 "Understand and use the definitions of sine,	"Understand and use the derivative of f(x) as	1 Wears and use the Condemnated Theorem of	"Understand and use the terms	"Interpret diagrams for single-variable data,	MECHANICS	"Understand and use derived quantities
		for all rational exponents"  "Use and manipulate surds, including	variables by elimination and by substitution, including one linear and one quadratic	straight line; gradient conditions for two straight lines to be parallel or perpendicular	for positive integer n; the notations n! and nCr: link to binomial probabilities"	cosine and tangent for all arguments; the sine and cosine rules; the area of a triangle in the form	the gradient of the tangent to the graph of y = f(x) at a general point (x, y); the gradient of	Calculus"	'population' and 'sample'" "Use samples to make informal inferences	including understanding that area in a histogram represents frequency"	hypothesis testing, developed through a binomial model: null hypothesis, alternative hypothesis,	and units: velocity, acceleration, force,
		rationalising the denominator"	equation"	"Be able to use straight line models in a	ncr; link to binomial probabilities	1/2absinC" "Understand and use the sine, cosine and tangent				"Connect to probability distributions"  "Recognise and interpret possible outliers in data	significance level, test statistic, 1-tail test, 2-tail test, critical value, critical region, acceptance region, p-	Officerstatic and use the language of
		"Manipulate polynomials algebraically, including expanding brackets and collecting	"Solve linear and quadratic inequalities in a single variable and interpret such inequalities	variety of contexts"		functions; their graphs, symmetries and periodicity' "Understand and use tan = sin/cos"	a given curve; second derivatives;	find the area under a curve"	including simple random sampling and	sets and statistical diagrams" "Select or critique data presentation techniques in	value" "Conduct a statistical hypothesis test for the	kinematics: position; displacement; distance travelled; velocity; speed; acceleration"
		like terms, factorisation and simple algebraic division; use of the factor theorem"	brackets and fractions"	"Understand and use the coordinate geometry of the circle including using the		"Understand and use sin2 + cos2 = 1" "Solve simple trigonometric equations in a given	differentiation from first principles for small positive integer powers of	"Know and use the function x a and its graph, where a is positive"	opportunity sampling" "Select or critique sampling techniques in the	the context of a statistical problem"  "Be able to clean data, including dealing with missin	proportion in the binomial distribution and interpret	t 2. "Proof by contradiction (including proof of
		"Work with quadratic functions and their	"Represent linear and quadratic inequalities graphically"	equation of a circle; completing the square to find the centre and radius of a circle; use of		interval, including quadratic equations in sin, cos and tan and equations involving multiples of the	"Understand and use the second derivative	"Know and use the function ex and its graph"  "Know that the gradient of ekx is equal to keke and	context of solving a statistical problem, including understanding that different	data, errors and outliers"	"Understand that a sample is being used to make an inference about the population and appreciate that	primes, and application to unfamiliar proofs)"
	¥		2. "Understand and use graphs of functions;	the following properties:  • the angle in a semicircle is a right angle		unknown angle"	as the rate of change of gradient"	hence understand why the exponential model is suitable in many applications"	samples can lead to different conclusions about the population"	<ol><li>"Interpret scatter diagrams and regression lines for bivariate data, including recognition of scatter</li></ol>	the significance level is the probability of incorrectly rejecting the null hypothesis"	factorising and cancelling, and algebraic
	onte	repeated roots; completing the square; solution of quadratic equations including	sketch curves defined by simple equations including polynomials, interpret algebraic	the perpendicular from the centre to a chord bisects the chord		"Use vectors in two dimensions"     "Calculate the magnitude and direction of a vector	"Differentiate xn, for rational values of n, and related constant multiples, sums and	"Know and use the definition of loga x as the inverse of ax , where a is positive and $x \ge 0$ "	2. "Interpret measures of central tendency	diagrams which include distinct sections of the population (calculations involving regression lines	3. "Understand, use and derive the formulae for	division (by linear expressions only)" "Decompose rational functions into partial
	evel (	solving quadratic equations in a function of the unknown"	solution of equations graphically; use intersection points of graphs to solve	the radius of a circle at a given point on its circumference is perpendicular to the		and convert between component form and magnitude/direction form*	differences"	"Know and use the functionIn x and its graph"  "Know and use In x as the inverse function of ex"	and variation, extending to standard deviation"	are excluded)" "Understand informal interpretation of correlation"	constant acceleration for motion in a straight line"	fractions (denominators not more complicated than squared linear terms and
	& A-L		equations" "Understand the effect of simple	tangent to the circle at that point		"Add vectors diagrammatically and perform the algebraic operations of vector addition and multiplication by scalars, and understand their	"Apply differentiation to find gradients, tangents and normals, maxima and minima	"Understand and use the laws of logarithms" "Solve equations of the form ax=b"	"Be able to calculate standard deviation, including from summary statistics"	"Understand that correlation does not imply causation"	"Understand the concept of a force; understand and use Newton's first law"     "Understand and use Newton's second law for	with no more than 3 terms, numerators constant or linear)"
	AS &		transformations on the graph of y = f(x)including sketching associated graphs"	"Understand and use the structure of mathematical proof, proceeding from given		geometrical interpretations"  "Understand and use position vectors; calculate the	and stationary points"	"Use logarithmic graphs to estimate parameters in relationships, given data for x and y" "Understand and use exponential growth and		"Understand and use mutually exclusive and independent events when calculating probabilities"	motion in a straight line (restricted to forces in two perpendicular directions or simple cases of forces	"Understand and use composite functions;
				assumptions through a series of logical steps to a conclusion; use methods of proof,		distance between two points represented by position vectors"	"Identify where functions are increasing or decreasing"	decay; use in modelling (examples may include the use of e in continuous compound interest,		"Link to discrete and continuous distributions"	given as 2-D vectors)"	inverse functions and their graphs" "Use of functions in modelling, including
				including proof by deduction, proof by exhaustion"		"Use vectors to solve problems in pure mathematic and in context, including forces"		radioactive decay, drug concentration decay, exponential growth as a model for population		"Understand and use simple, discrete probability distributions (calculation of mean and variance of	straight line under gravity; gravitational acceleration	onsideration of limitations and refinements of the models"
				"Disproof by counter example"				growth); consideration of limitations and refinements of exponential models"		discrete random variables is excluded), including the binomial distribution, as a model; calculate	e accuracy" "(The inverse square law for gravitation is not	
										probabilities using the binomial distribution"	required and g may be assumed to be constant, but students should be aware that g is not a universal	
											constant but depends on location)" "Understand and use Newton's third law;	
		1. Index Laws	Simultaneous Equations, including	Equations of straight lines	Pascal's Triangle	1. Cosine Rule	Gradients of curves	1. Integrating xn	1. Populations and samples	1. Outliers	equilibrium of forces on a particle and motion in a  1. Hypothesis Testing	1. Functions of time
		Expanding Brackets Factorsing	quadratics and on a graph Inequalities, including quadratic and on a	Parallel and Perpendicular lines	Factorial notation Binomial expansion	Sine Rule Area of Triangle (sine rule)	Finding the derivative Differentiating xn	Indefinite integrals Finding functions	Sampling, including non-random Types of data	Box Plots Cumulative Frequency	Finding critical values One-tailed tests	Using differentiation Maxima and Minima
Ĕ		Negative and Fractional Indices Surds, including rationalising denominator	graph Regions of inequalities	Midpoints and perpendicular bisectors     Equation of a circle	Solving binomial problems Binomial estimation	Graphs of sine, cosine and tangent, including transformation of graphs	Differentiating quadratics Differentiating functions with two or more	Definite integrals Areas under curves and the x-axis	2. Measures of central tendency and spread	Histograms	Two-tailed tests	Using integration
.0	eg <sub>e</sub>	Solving quadratics, including completing	2. Cubic Graphs	Tangents and Chords Circles and triangles		2. Angles in quadrants	terms Gradients, tangents and normal	Areas between curves and lines	Variance and standard deviation Coding	2. Correlation Linear Regression	Constructing a model     Modelling assumptions	Proof by contradiction     Algebraic Fractions
Transmission	owlec	the square Functions	Quartic Graphs Reciprocal Graphs	3. Algebraic fractions		Trigonometric identities Trigonometric equations	Increasing and decreasing functions Second order derivatives	2. Exponential functions y = ex		Calculating probabilities	Quantities and units Working with vectors	Partial Fractions Repeated factors
п	ve Kn	The What! Quadratic graphs The discriminant	Translating Graphs Sketching Graphs	Dividing polynomials Factor Theorem		Vectors, including representing vectors	Stationary points Sketching gradient functions	Logarithms, including laws of logarithms Solving equations using logarithms		Venn diagrams Mutually exclusive and independent events	3. Displacement-time graphs	Algebraic division
Sr	stanti	Modelling with quadratics	Transforming Functions	Proof		Magnitude and direction Position vectors		Natural logarithms Logarithms and non-linear data		Tree diagrams	Velocity-time graphs Constant acceleration formulae	The modulus function     Functions and mappings
	Subs									Probability distributions     Binomial distributions	Vertical motion under gravity	Composite functions Inverse functions
Lo										Cumulative probabilities	Force diagrams     Forces as vectors	Combining transformations
											Forces and acceleration Motion in 2 dimensions	
Cultural											Connected particles	
		which is a key skill for them to develop.	These topics are also very much graph based and so students will be encouraged to draw,	students should be adept at sketching these -	One of the skills key to this topic is estimation. Students will need to understand	are key to these topics. Students will be	graphs in order to understand the concept of	This is an opportunity for students to think about modelling real world situations using	their own data and to engage with real life	students will need to apply the skills they	Use of practical applications should be part of the 'how' in this mechanics topic. This could	students will learn hor to present proofs
	ge	Students will also complete practice questions and past exam questions.	sketch and manipulate and amend graphs Students will complete practice questions	they will continue to develop their skills in this area. Students will also focus on the skill		encouraged to develop their skills of sketching and labelling geometric shapes,	differentiation. Students will learn the skills needed in order			Students can still collect primary data in orde	er also collection of data to verify relationships	
Ŋ	owlec	Students will also be encouraged to start developing their own questions and also	and also past exam questions. Students will also be encouraged to create	of proof and how to best present proofs in order to convey clarity	Students will complete practice questions and also past exam questions.	angles and graphs. Students will complete practice questions	need to relate these to gradients.	graphs in order to find the areas underneath them and to find gradients of tangents	their graphing skills - this time with a focus on scatter graphs and statistical analysis.	also some nice probability applications that	through experimentation.	mark schemes on these topics as this is an area where there are often multiple methods
	iry kn	The How!	and develop their own questions on these topics and link them to the previous topics.	Students will complete practice questions and also past exam questions.	Students will also be encouraged to create and develop their own questions on these	and also past exam questions. Students will also be encouraged to create	Students will complete practice questions and also past exam questions.		Students should be encouraged to engage with past exam questions, mark schemes and			to achieve the same outcome
	iplina			Students will also be encouraged to create and develop their own questions on these	topics and link them to the previous topics. Students will also need to start critiquing the	and develop their own questions on these topics and link them to the previous topics.	Students will also be encouraged to create and develop their own questions on these		examiners reports. Students should also continue to develop and			
	Disc			topics and link them to the previous topics.	questions that other students have made.		topics and link them to the previous topics.		share their own creations.	be developing and sharing ideas		
		1. Builds from KS4:	Builds from KS4: Simultaneous Equations	1. Builds from KS4: v=mx+c	Builds from KS4: Expanding and factorising	Builds from KS4: Cosine Rule	Builds from KS4: Quadratic graphs	Builds from KS4:  Areas on graphs	Builds from KS4: Sampling	Builds from KS4:     Cumulative Frequency	Builds from KS4:     Independent Research Projects and Drawing	Builds from Y12: Differentiation
		1. Builds from KS4: Indices Expanding and Factorising Surds	Simultaneous Equations Inequalities	y=mx+c	Builds from KS4: Expanding and factorising Sequences	Cosine Rule Sine Rule	Quadratic graphs	Areas on graphs Further develops in Y13:	Builds from KS4:     Sampling     Types of Data	Cumulative Frequency Box Plots	Independent Research Projects and Drawing Conclusions	Builds from Y12: Differentiation Integration
		Indices Expanding and Factorising Surds Further develops in Y13:	Simultaneous Equations	y=mx+c  2. <u>Builds from KS4:</u> Circle theorems	Expanding and factorising Sequences Further develops in Y13:	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent	Quadratic graphs  Further develops in Y13:  Differentiating sin and cos	Areas on graphs Further develops in Y13: Further integration	Sampling Types of Data  2. Builds from KS4:	Cumulative Frequency Box Plots Histograms	Independent Research Projects and Drawing	Differentiation Integration  2. <u>Builds from Y12:</u>
	5	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Proof	Simultaneous Equations Inequalities <u>Further develops in Y13:</u> Differentiation and Integration 2. <u>Builds from KS4:</u>	y=mx+c 2. <u>Builds from KS4:</u>	Expanding and factorising Sequences	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometric functions	Quadratic graphs  Further develops in Y13: Differentiating sin and cos Differentiating exponentials and logarithms Chain rule	Areas on graphs Further develops in Y13:	Sampling Types of Data  2. Builds from KS4: Averages and Range Further develops in Y13:	Cumulative Frequency Box Plots Histograms  2. <u>Builds from KS4:</u> Scatter Graphs	Independent Research Projects and Drawing Conclusions Further develops in Y13:	Differentiation Integration  2. <u>Builds from Y12:</u> Algebraic methods
	(Flow)	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Proof Binomial Expansion	Simultaneous Equations Inequalities Further develops in Y13: Differentiation and Integration  2. <u>Builds from KS4:</u> Cubic and Reciprocal Graphs Sketching Graphs	y=mx+c  2. <u>Builds from KS4:</u> Circle theorems Further develops in Y13: Radians  3. <u>Builds from KS4:</u>	Expanding and factorising Sequences Further develops in Y13:	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometric functions Trigonometry and modelling	Quadratic graphs  Further develops in Y13: Differentiating sin and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule	Areas on graphs Further develops in Y13: Further integration  2. Builds from KS4:	Sampling Types of Data  2. <u>Builds from KS4:</u> Averages and Range	Cumulative Frequency Box Plots Histograms  2. Builds from K54: Scatter Graphs Further develops in Y13: Measuring correlation	Independent Research Projects and Drawing Conclusions <u>Further develops in Y13:</u> Hypothesis testing for zero correlaton	Differentiation Integration  2. <u>Builds from Y12:</u>
	incing (Flow)	Indices Expanding and Factorising Surds Eurther develops in Y13: Algebraic Methods Proof Binomial Expansion 32 2. Builds from K54: Solving quadrates	Simultaneous Equations Inequalities Further develops in Y13: Differentiation and Integration  2. <u>Builds from KS4:</u> Cubic and Reciprocal Graphs	y-ms-c 2. <u>Builds from K\$4</u> . Circle theorems <u>Further develops in Y13:</u> Radians 3. <u>Builds from K\$4</u> . Algebraic fractions Proof	Expanding and factorising Sequences Further develops in Y13:	Cosine Rule  Area of Triangle (sine rule)  Graphs of sine, cosine and tangent  Further develops in Y13:  Trigonometric functions  Trigonometry and modelling  2. <u>Builds from KS4</u> .  Trigonometry in right-angled triangles	Quadratic graphs  Further develops in Y133.  Differentiating sin and cos  Differentiating exponentials and logarithms  Chain rule  Product rule  Quotient rule  Parametric differentiation  Implict differentiation	Areas on graphs Further develops in Y13: Further integration  2. Builds from KS4:	Sampling Types of Data  2. Builds from KS4: Averages and Range Further develops in Y13:	Cumulative Frequency Box Plots Histograms  2. <u>Builds from KS4:</u> Scatter Graphs <u>Further develops in Y13:</u> Meassuring correlation Hypothesis testing for correlation	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y13: Hypothesis testing for zero correlation 2. <u>Builds from KS4.</u> Units Vectors 3. <u>Builds from KS4.</u>	Offerentiation Integration 2. Builds from Y12: Algebraic methods 3. Builds from Y12:
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	Sequencing (Flow)	Indices Expanding and Factorising Surds Eurther develops in Y13: Algebraic Methods Proof Binomial Expansion Binomial Expansion Use Sulfids from K54: Solving quadratics Quadratic graphs Quadratic graphs Further develops in Y13:	Simultaneous Equations Innequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Furthers develops in Y13:	yemsec  2. Builds from KS4: Circle theorems Further develops in Y13; Radians  3. Builds from KS4: Algebraic fractions Proof Further develops in Y13:	Expanding and factorising Sequences Further develops in Y13:	Cosine Rule Sine Rule Area of Triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometric functions Trigonometry incritains Trigonometry and modelling 2. <u>Builds from K54:</u> Trigonometry in right-angled triangles Further develops in Y13: Trigonometric functions Trigonometric functions Trigonometric functions Trigonometric functions 3. <u>Builds from K54:</u>	Quadratic graphs  Further develops in Y13: Offerentiating is in and cos Offerentiating exponentials and logarithms Chain rule Product rule Parametric differentiation Implict differentiation Using second derinatives	Areas on graphs Further develops in Y13: Further integration  2. Builds from KS4:	Sampling Types of Data  2. Builds from KS4: Averages and Range Further develops in Y13:	Cumulative Frequency Box Piots Histograms 2. <u>Builds from KS4</u> : Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. <u>Builds from KS4</u> : Calculating For Scatter Graphs Venn Diagrams Mutually Exclusive Events Tree Diagrams Further develops in Y13: Conditional probability Conditional probability	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlation  2. Builds from KS4:  Units  Vectors  3. Builds from KS4:  Velocity-Time Graphs  Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4.  Vectors  Further develops in Y13:  Further develops in Y13:  Forces and Friction	Offerentiation Integration 2. Builds from Y12: Algebraic methods 3. Builds from Y12:
	Sequencing (Flow)	Indices Expanding and Factorising Surds Eurther develops in Y13: Algebraic Methods Proof Binomial Expansion Binomial Expansion Use Sulfids from K54: Solving quadratics Quadratic graphs Quadratic graphs Further develops in Y13:	Simultaneous Equations Innequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Furthers develops in Y13:	yemsec 2. <u>Builds from KS4</u> . Circle theorems <u>Further develops in Y13</u> : Radians 3. <u>Builds from KS4</u> . Algebraic fractions Proof <u>Further develops in Y13</u> : Algebraic methods	Expanding and factorising Sequences Further develops in Y13:	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Linuctions Trigonometry and modelling 2. <u>Builds from K54:</u> Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. <u>Builds from K54:</u> Trigonometry and modelling 3. <u>Builds from K54:</u> Column vectors Further develops in Y13: Vectors in 3D	Quadratic graphs Further develops in Y33; Differentiating sin and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Parametric differentiation Implict differentiation Using second derivatives Rates of change	Areas on graphs Further develops in Y13: Further integration  2. <u>Builds from K54.</u> Solving equations	Sampling Types of Data  2. Builds from KS4: Averages and Range Further develops in Y13:	Cumulative Frequency Box Piots Histograms 2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. Builds from KS4: Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Epther develops in Y13: Conditional probability 4. Further develops in Y13: Conditional probability 4. Further develops in Y13: Normal distribution	Independent Research Projects and Drawing Conclusions Further develops in Y13.  Further develops in Y13.  Hypothesis testing for zero correlaton  2. Builds from K54.  Units  Vectors  3. Builds from K54.  Velocity-Time Graphs  Further develops in Y13.  Variable acceleration in one dimension  4. Builds from K54.  Vectors  Further develops in Y13.  Forces and Friction  Application of Forces	Offerentiation Integration 2. Builds from Y12: Algebraic methods 3. Builds from Y12:
	ative Sequencing (Flow)	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Porof Binomial Expansion Binomial Expansion Surds	Simultaneous Equations Innequalities Further develops in Y33: Differentation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Furthers develops in Y33: Functions and Graphs	yemsec 2. <u>Builds from KS4</u> . Circle theorems <u>Further develops in Y13</u> : Radians 3. <u>Builds from KS4</u> . Algebraic fractions Proof <u>Further develops in Y13</u> : Algebraic methods	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Linuctions Trigonometry and modelling 2. <u>Builds from K54:</u> Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. <u>Builds from K54:</u> Trigonometry and modelling 3. <u>Builds from K54:</u> Column vectors Further develops in Y13: Vectors in 3D	Quadratic graphs  Further develops in Y13: Offerentiating is in and cos Offerentiating exponentials and logarithms Chain rule Product rule Parametric differentiation Implict differentiation Using second derinatives	Areas on graphs Further develops in Y13: Further integration  2. <u>Builds from K54.</u> Solving equations	Sampling Types of Data  2. <u>Builds from KS4.</u> Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation Hypothesis testing for correlation Salids from KS4: Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Further develops in Y13: Conditional probability 4. Further develops in Y13: 4. Further develops in Y13:	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlation  2. Builds from KS4:  Units  Vectors  3. Builds from KS4:  Velocity-Time Graphs  Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4.  Vectors  Further develops in Y13:  Further develops in Y13:  Forces and Friction	Differentiation Integration  2. <u>Builds from Y1.2</u> : Algebraic methods  3. <u>Builds from Y1.2</u> : Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill
	Sequencing (Flow) Assessment	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Porof Binomial Expansion Binomial Expansion Surds	Simultaneous Equations Innequalities Further develops in Y13.  Differentation and Integration  2. Builds from KS4:  Cubic and Reciprocal Graphs  Stetching Graphs  Furthers develops in Y13.  Functions and Graphs  End of unit assessments using the Pearson	yemsec 2. Builds from KS4. Cricle theorems Further develops in Y13: Radians 3. Builds from KS4. Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction  End of unit and reflection on the AP1 assessment. Past exam questions to fill	Cosine Rule Sine Rule Area of Triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y12: Yigonometric (functions Trigonometry and modelling 2. Builds from KS4: Trigonometry and modelling 2. Builds from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Builds from KS4: Column vectors Trigonometry and modelling 3. Builds from KS4: Column vectors Trigonometry and modelling 4. Builds from KS4: Column vectors Turther develops in Y13: Vectors in 3D End of unit assessments using the Pearson	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating synnectials and logarithms Chain rule Product rule Quoteent rule Quoteent rule Ramentic differentiation lungist differentiation Using second derivatives Rates of change	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation  3. Builds from KS4: Caculating Probability Venn Diagrams Further develops in Y13: Conditional probability Further develops in Y13: Conditional probability  4. Further develops in Y13: Normal distribution  End of unit assessments using the Pearson End of unit assessments using the Pearson	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlation  2. Builds from KS4:  Units  Vectors  3. Builds from KS4:  Vectory-Time Graphs  Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4:  Vectors  Further develops in Y13:  Forces and Friction  Application of Forces  AP3 Assessment - Whole School Data	Differentiation integration  2. <u>Builds from Y12-</u> Algebraic methods  3. <u>Builds from Y12-</u> Graphs and transformations  End of unit and reflection on the AP3
	Summative Sequencing (Flow)	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Porof Binomial Expansion Binomial Expansion Surds	Simultaneous Equations Innequalities Further develops in Y13.  Differentation and Integration  2. Builds from KS4:  Cubic and Reciprocal Graphs  Stetching Graphs  Furthers develops in Y13.  Functions and Graphs  End of unit assessments using the Pearson	yemsec 2. Builds from KS4. Cricle theorems Further develops in Y13: Radians 3. Builds from KS4. Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data	Expanding and factorising Sequences Sequences Further develops in Y13: Binomial expansion, including partial fractions are a sequences of the sequence of the	Cosine Rule Sine Rule Area of Triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y12: Yigonometric (functions Trigonometry and modelling 2. Builds from KS4: Trigonometry and modelling 2. Builds from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Builds from KS4: Column vectors Trigonometry and modelling 3. Builds from KS4: Column vectors Trigonometry and modelling 4. Builds from KS4: Column vectors Turther develops in Y13: Vectors in 3D End of unit assessments using the Pearson	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating synnectials and logarithms Chain rule Product rule Quoteent rule Quoteent rule Ramentic differentiation lungist differentiation Using second derivatives Rates of change	Areas on graphs Further develops in Y13. Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation  3. Builds from KS4: Caculating Probability Venn Diagrams Further develops in Y13: Conditional probability Further develops in Y13: Conditional probability  4. Further develops in Y13: Normal distribution  End of unit assessments using the Pearson End of unit assessments using the Pearson	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlation  2. Builds from KS4:  Units  Vectors  3. Builds from KS4:  Vectory-Time Graphs  Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4:  Vectors  Further develops in Y13:  Forces and Friction  Application of Forces  AP3 Assessment - Whole School Data	Differentiation Integration  2. <u>Builds from Y12-</u> Algebraic methods  3. <u>Builds from Y22-</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill knowledge gaps for the AP3 had be used
ıt	Summative Sequencing (Flow) Assessment	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Porof Binomial Expansion Binomial Expansion Surds	Simultaneous Equations Innequalities Further develops in Y13.  Differentation and Integration  2. Builds from KS4:  Cubic and Reciprocal Graphs  Stetching Graphs  Furthers develops in Y13.  Functions and Graphs  End of unit assessments using the Pearson	yemsec 2. Builds from KS4. Cricle theorems Further develops in Y13: Radians 3. Builds from KS4. Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data	Expanding and factorising Sequences Sequences Further develops in Y13: Binomial expansion, including partial fractions are a sequences of the sequence of the	Cosine Rule Sine Rule Area of Triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y12: Yigonometric (functions Trigonometry and modelling 2. Builds from KS4: Trigonometry and modelling 2. Builds from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Builds from KS4: Column vectors Trigonometry and modelling 3. Builds from KS4: Column vectors Trigonometry and modelling 4. Builds from KS4: Column vectors Turther develops in Y13: Vectors in 3D End of unit assessments using the Pearson	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating synnectials and logarithms Chain rule Product rule Quoteent rule Quoteent rule Ramentic differentiation lungist differentiation Using second derivatives Rates of change	Areas on graphs Further develops in Y13. Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Enther develops in ¥13; Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gap for the AP3 should be used for Aft in the lessons	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation  3. Builds from KS4: Caculating Probability Venn Diagrams Further develops in Y13: Conditional probability Further develops in Y13: Conditional probability  4. Further develops in Y13: Normal distribution  End of unit assessments using the Pearson End of unit assessments using the Pearson	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlation  2. Builds from KS4:  Units  Vectors  3. Builds from KS4:  Vectory-Time Graphs  Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4:  Vectors  Further develops in Y13:  Forces and Friction  Application of Forces  AP3 Assessment - Whole School Data	Differentiation Integration  2. <u>Builds from Y12-</u> Algebraic methods  3. <u>Builds from Y22-</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill knowledge gaps for the AP3 had be used
nal ment	Virtue Summative Sequencing (Flow)	Indices Expanding and Factorising Surds Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Priori Binomial Expansion Binomial Expansion Binomial Expansion Country 2. Builds from K54: Solving quadratics Quadratics Quadratics graphs Functions and graphs Functions and graphs Regular End of unit assessments  Regular End of unit assessments  Friendliness & Civility  The opportunity to	Simultaneous Equations Inequalities Further develops in Y13: Further develops in Y13: Differentiation and Integration  2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness	yemsec 2. <u>Bulled from KS4.</u> Circle theorems Further develops in Y13: Radians 3. <u>Bulled from KS4.</u> Algebraic fractions Proof Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage	Expanding and factorising Sequences Sequences Further develops in Y33: Binomial expansion, including partial fraction  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge paps for the AP3 should be used for At1 in the lessons  Generosity	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry (nuctions Trigonometry and modelling 2. Builds from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Builds from KS4: Column vectors Further develops in Y13: Vectors in 310 End of unit assessments using the Pearson active learn resources  Gratitude	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Quotient rule Parametric differentiation limplict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour	Sampling Types of Data  2. <u>Builds from KS4:</u> Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for AN. in the lessons	Cumulative Frequency Box Piots Histograms 2. <u>Builds from KS4</u> : Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. <u>Builds from KS4</u> : Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Further develops in Y13: Conditional probability 4. <u>Further develops in Y13:</u> Conditional probability End of unit assessments using the Pearson active learn resources	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlaton  2. Builds from KS4.  Units Vectors  3. Builds from KS4.  Velocity-Time Graphs Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4.  Vectors  Further develops in Y13:  Forces and Friction  Application of Forces  AP3 Assessment - Whole School Data  Collection  Compassion	Differentiation integration  2. <u>Builds from Y12:</u> Algebraic methods  3. <u>Builds from Y12:</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for AN. In the lessons  Good Sense
sonal werment	ue Virtue Summative Sequencing (Flow)	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Further develops in Y13: Algebraic Methods Prof Binomial Expansion Binomial Expans	Simultaneous Equations Inequalities Inequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness  Students will look at how graphs and scales.	yemse* 2. <u>Bulled from KS4.</u> Circle theorems Further develops in Y13: Radians 3. <u>Bulled from KS4.</u> Algebraic fractions Proof Further develops in Y13: Algebraic methods  API. Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction.  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge paps for the AP3 should be used for Aft. in the lessons  Generosity  Students should be generous with their time in order to support each other both	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Innuctions Trigonometry and modelling 2. Builds from KS4: Trigonometry and modelling 3. Builds from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Builds from KS4: Column vectors Further develops in Y13: Vectors in 3D End of unit assessments using the Pearson active learn resources  Gratitude  Students should be taught about the work of early mathematicians and scientrists and	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Quotient rule Implict differentiation Implict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate	Sampling Types of Data  2. <u>Builds from KS4:</u> Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ARI, in the lessons  Sett-1  Students will have some skills for data collection from GCSE. This will be an	Cumulative Frequency Box Piots Histograms 2. <u>Builds from KS4</u> : Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. <u>Builds from KS4</u> : Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Further develops in Y13: Conditional probability 4. <u>Further develops in Y13:</u> Conditional probability for d'unit assessments using the Pearson active learn resources  Asstery  This is an opportunity for students to master their understanding of the different ways in	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y13: Hypothesis testing for zero correlation 2. Builds from KS4. Units Vectors 3. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Variable acceleration in one dimension 4. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Forces and Friction Application of Forces and Friction Application of Forces and Friction Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around other at the potentially stressful time around	Differentiation integration  2. <u>Builds from Y12:</u> Algebraic methods  3. <u>Builds from Y12:</u> Graphs and transformations  assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ARI, in the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in
Personal npowerment	o Virtue Summative Sequencing (Flow)	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Proof Binomial Expansion Binomial Expansion Binomial Expansion Countries	Simultaneous Equations Inequalities Inequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness  Students will look at how graphs and scales.	ymmse* 2. <u>Bulled from KS4.</u> Circle theorems Further develops in Y13: Radians 3. <u>Builed from KS4.</u> Algebraic fractions Proof Further develops in Y13: Algebraic methods  AP1. Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen they are making they are maki	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction.  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge paps for the AP3 should be used for Aft. in the lessons  Generosity  Students should be generous with their time in order to support each other both	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Innuctions Trigonometry and modelling 2. <u>Bulls's from KS4</u> . Trigonometry and modelling 2. <u>Bulls's from KS4</u> . Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. <u>Bulls's from KS4</u> . Column vectors Trigonometry and modelling 3. <u>Bulls's from KS4</u> . Vectors in 3D End of unit assessments using the Pearson active learn resources Gratitude  Students should be taught about the work of early mathematics and scientrists and should be encouraged to show graitude for the work that these poinners have fore work that there poinners have been great as the property mathematics and scientrists and should be encouraged to show graitude for the work that these poinners have beginners are sources	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Quotient rule Implict differentiation lumplict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and to share	Areas on graphs Further develops in Y13: Further integration 2. Builds from KS4: Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate agood temper! This like differentiation is a tricky topic when first introduced and	Sampling Types of Data  2. Builds from KS4: Averages and Range Further develops: in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ARI, in the lessons  Self-4  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics.	Cumulative Frequency Box Piots Histograms 2. <u>Builds from KS4</u> : Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. <u>Builds from KS4</u> : Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Experiment of the Common State Conditional probability 4. <u>Further develops in Y13</u> : Conditional probability A <u>Further develops in Y13</u> : Shormal distribution. End of unit assessments using the Pearson active learn resources  Mastery  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discussion the suitability of graphs will be tassion to the suitability of graphs will be tassions.	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y13: Hypothesis testing for zero correlation 2. Builds from KS4. Units Vectors 3. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Variable acceleration in one dimension 4. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Forces and Friction Application of Forces and Friction Application of Forces and Friction Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around other at the potentially stressful time around	Differentiation integration  2. Builds from Y12: Algebraic methods  3. Builds from Y12: Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ANI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly rears for development over the
Personal Empowerment	Link to Virtue Summative Sequencing (Flow)	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Further develops in Y13: Algebraic Methods Proof Billiomala Expansion Bil	Simultaneous Equations Inequalities Inequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness  Students will look at how graphs and scales.	yemsec 2. Builds from KS4: Cricle theorems Further develops in Y13: Radians 3. Builds from KS4: Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that	Expanding and factorising Sequences Further develops in Y13: Binomial expansion, including partial fraction:  End of unit and reflection on the AP1 assessment. Past exam questions to fill sonvoledge paps for the AP3 should be used for API. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP3 academically and emotionally around the AP3 academically and emotionally around the AP3	Cosine Rule  Area of triangle (sine rule)  Graphs of sine, cosine and tangent  Further develops in Y13:  Trigonometrix (functions  Trigonometry and modelling  2. Builds from KS4: Trigonometry and modelling  2. Builds from KS4: Trigonometry in right-angled triangles  further develops in Y13: Trigonometry and modelling  3. Builds from KS4: Column vectors  Further develops in Y13: Vectors in 10  End of unit assessments using the Pearson  active learn resources  Gratitude  Students should be taught about the work of early mathematicians and scientrists and should be encouraged to show garatude for	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating synnentials and logarithms Chain rule Product rule Quoteen rule Quoteen rule Implict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and be open about	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper! This like differentiation is a	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation  3. Builds from KS4: Caculating Probability Venn Diagrams Venn Diagrams Further develops in Y13: Conditional probability  4. Further develops in Y13: Normal distribution Earther develops in Y13: Normal distribution Earther develops in Y13: Normal distribution  4. Further develops in Y13: Normal distribution Australia develops in Y13: Normal distribution  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discoverse	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y13: Hypothesis testing for zero correlation 2. Builds from KS4. Units Vectors 3. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Variable acceleration in one dimension 4. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Forces and Friction Application of Forces and Friction Application of Forces and Friction Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around other at the potentially stressful time around	Differentiation integration  2. <u>Builds from Y12-</u> Algebraic methods  3. <u>Builds from Y12-</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gaps for the AP3 should be used for Aft. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify razes of strength and more
	Link to Vintue Summative Sequencing (Flow) Assessment	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Further develops in Y13: Algebraic Methods Proof Billiomala Expansion Bil	Simultaneous Equations Inequalities Inequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness  Students will look at how graphs and scales.	ymmse* 2. <u>Bulled from KS4.</u> Circle theorems Further develops in Y13: Radians 3. <u>Builed from KS4.</u> Algebraic fractions Proof Further develops in Y13: Algebraic methods  AP1. Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen they are making they are maki	Expanding and factorising Sequences Further develops in Y13: Binomial expansion, including partial fraction:  End of unit and reflection on the AP1 assessment. Past exam questions to fill sonvoledge paps for the AP3 should be used for API. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP3	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Innuctions Trigonometry and modelling 2. Bulls' from KS4: Trigonometry and modelling 2. Bulls' from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Bulls' from KS4: Column vectors Trigonometry and modelling 3. Bulls' from KS4: Column vectors Further develops in Y13: Vectors in 3D End of unit assessments using the Pearson active learn resources Gratitude  Students should be taught about the work of early mathematican and scientrists and should be encouraged to show graitude for the work that these pioneers have done yet and	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Quotient rule Implict differentiation lumplict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and to share	Areas on graphs Further develops in Y13: Further integration 2. Builds from KS4: Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate agood temper! This like differentiation is a tricky topic when first introduced and	Sampling Types of Data  2. Builds from KS4: Averages and Range Further develops: in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ARI, in the lessons  Self-4  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics.	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Velocity-Time Graphs Further develops in Y13: Variable acceleration in one dimension 4. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Forces and Friction Application of Forces and Friction Application of Forces and Friction Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around other at the potentially stressful time around	Differentiation integration  2. Builds from Y12: Algebraic methods  3. Builds from Y12: Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ANI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly rears for development over the
for	Skill Link to Vintue Summative Sequencing (Flow) Assessment	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Further develops in Y13: Algebraic Methods Proof Billiomala Expansion Bil	Simultaneous Equations Inequalities Inequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness  Students will look at how graphs and scales.	ymmse* 2. <u>Bulled from KS4.</u> Circle theorems Further develops in Y13: Radians 3. <u>Builed from KS4.</u> Algebraic fractions Proof Further develops in Y13: Algebraic methods  AP1. Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen they are making they are maki	Expanding and factorising Sequences Further develops in Y13: Binomial expansion, including partial fraction:  End of unit and reflection on the AP1 assessment. Past exam questions to fill sonvoledge paps for the AP3 should be used for API. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP3	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Innuctions Trigonometry and modelling 2. Bulls' from KS4: Trigonometry and modelling 2. Bulls' from KS4: Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. Bulls' from KS4: Column vectors Trigonometry and modelling 3. Bulls' from KS4: Column vectors Further develops in Y13: Vectors in 3D End of unit assessments using the Pearson active learn resources Gratitude  Students should be taught about the work of early mathematican and scientrists and should be encouraged to show graitude for the work that these pioneers have done yet and	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Quotient rule Implict differentiation lumplict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and to share	Areas on graphs Further develops in Y13: Further integration 2. Builds from KS4: Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate agood temper! This like differentiation is a tricky topic when first introduced and	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Enther develops in ¥13; Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Sett-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.	Cumulative Frequency Box Piots Histograms 2. <u>Builds from KS4</u> : Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. <u>Builds from KS4</u> : Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Experiment of the Common State Conditional probability 4. <u>Further develops in Y13</u> : Conditional probability A <u>Further develops in Y13</u> : Shormal distribution. End of unit assessments using the Pearson active learn resources  Mastery  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discussion the suitability of graphs will be tassion to the suitability of graphs will be tassions.	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y13: Hypothesis testing for zero correlation 2. Builds from KS4. Units Vectors 3. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Variable acceleration in one dimension 4. Builds from KS4. Velocity-Time Graphs Further develops in Y13: Forces and Friction Application of Forces and Friction Application of Forces and Friction Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around other at the potentially stressful time around	Differentiation integration  2. Builds from Y12: Algebraic methods  3. Builds from Y12: Graphs and transformations  End of unit and reflection on the AP3 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ANI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly rears for development over the
for		Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Proof Binomial Expansion Binomial Expansion Binomial Expansion Countries	Simultaneous Equations Inequalities   Further develops in Y13:   Differentation and Integration   2. Builds from KS4:   Cubic and Reciprocal Graphs   Stetching Graphs   Furthers develops in Y13:   Functions and Graphs   Furthers develops in Y13:   Functions and Graphs    End of unit assessments using the Pearson   Active learn resources    Justice & Truthfulness    Students will look at how graphs and scales   can be manipulated to hide the 'truth'    Leadership	yemse* 2. <u>Bulled from KS4</u> . Circle theorems Further develops in Y13: Radians 3. <u>Bulled from KS4</u> . Algebraic fractions Proof Further develops in Y13: Algebraic methods  API Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that year making in order to deepen their understanding and the understandind of others  Problem-Solving	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction.  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity	Cosine Rule Sine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry Incurcions Trigonometry and modelling 2. <u>Bullst from KS4:</u> Trigonometry in right-angled triangles Further develops in Y13: Trigonometry and modelling 3. <u>Bullst from KS4:</u> Column vectors Trigonometry and modelling 3. <u>Bullst from KS4:</u> Column vectors Further develops in Y13: Vectors in 310 End of unit assessments using the Pearson active learn resources  Gratitude  Students should be taught about the work of early mathematicians and scientrists and should be encouraged to show graitude for the work that these pioneers have done to benefit us and humanity.  Staying Positive	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating synner and logarithms Chain rule Product rule Quotient rule Quotient rule Implict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and be open about how they are finding the topic and to share ideas on how to tackle problems.  Speaking	Areas on graphs Further develops in Y13: Further integration 2. Builds from KS4: Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate agood temper! This like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Enther develops in ¥13; Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Sett-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.	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Discussions on the suitability of graphs will be better to students self mastery of these concepts	Independent Research Projects and Drawing Conclusions Further develops in Y13:  Further develops in Y13:  Linits Velocity Time Graphs Further develops in Y13:  Velocity-Time Graphs Further develops in Y13:  Variable acceleration in one dimension  A. Builds from KS4:  Vectors  Further develops in Y13:  Forces and Friction  Application of Forces  AP3 Assessment - Whole School Data  Collection  Compassion  Students will consider compassion for each  other at the potentially stressful time around  the AP3 end of year assessemts.	Differentiation integration  2. <u>Builds from Y12</u> . Algebraic methods  3. <u>Builds from Y12</u> . Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gap for the AP3 should be used for Aft in the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify raise of strength and more importantly areas for development over the summer break.
for	Skill	Indices  Expanding and Factorising Surds  Further develops in Y13: Algebraic Methods  Proof Binomial Expansion  Binomia Expansion  Bino	Simultaneous Equations Inequalities Further develops in Y13: Differentation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Sketching Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs State of Graphs St	yemset 2. <u>Builds from KS4</u> . Crifed theorems Further develops in Y13: Radians 3. <u>Builds from KS4</u> . Algebraic fractions Gradians 3. <u>Builds from KS4</u> . Algebraic fractions Further develops in Y13: Algebraic methods  AP1. Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and hatem insides that understanding an order begiens they understanding and the understanding of others  Problem-Solving These topics naturally lend themselves to the skill of problems solving and their will be	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction.  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity  Students should be encouraged to create their own questions based on given	Cosine Rule  Area of triangle (sine rule)  Graphs of sine, cosine and tangent  Further develops in Y13:  Trigonometry functions  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  3. Builds from ESA  Column vectors  Further develops in Y13:  Vectors in 3D  End of unit assessments using the Pearson active learn resources  Gratitude  Students should be taught about the work of early mathematicians and soleritists and should be encouraged to show gardtude for the work that these pioneers have done to benefit us and humanity.  Staping Positive  When tackling some of the newer concepts, students should stay positive in order to be students of the newer concepts, students should stay positive in order to be students and suppositive in order to be students should stay positive in order to be students.	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is and cos Differentiating exponentials and logarithms Chain rule Product rule Quotient rule Quotient rule Research of the research of th	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4</u> . Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper! This like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper, staying positive will be important	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Enther develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this still during work on statistics as it is introduced this year.  Almin  Students will need to reflect carefully on the AP2 exam results and use these as the basis	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation Mutually Ecclusive Events Tree Diagrams Mutually Ecclusive Events Tree Diagrams Further develops in Y13: Normal distribution Further develops in Y13: Normal distribution Hospital distribution Austreey  Asstery  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discours which data can be represented. Discours on the subtability of graphs will be beyon students self mastery of these concepts  Students will need to focus on revision for the AP3 assessment which will be taking	Independent Research Projects and Drawing Conclusions  Further develops in Y13:  Further develops in Y14:  Lints	Differentiation integration  2. <u>Builds from Y12</u> . Algebraic methods  3. <u>Builds from Y12</u> . Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gaps for the AP3 should be used for ARI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly areas for development over the summer break.  Teamwork  There will be some opportunity for some practical based activities when studying
for	to Skill Skill	Indices  Expanding and Factorising  Surds  Further develops in Y13:  Algebraic Methods  Proof  Binomial Expansion  Binomial Ex	Simultaneous Equations Innequalities Further develops in Y13: Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Stetching Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs  End of unit assessments using the Pearson Active learn resources  Justice & Truthfulness  Students will look at how graphs and scales can be manipulated to hide the 'truth'  Leadership  Students will lead in their own learning as	yemset 2. <u>Builds from KS4</u> . Crifed theorems Fyrther develops in Y13: Radians 3. <u>Builds from KS4</u> . Algebraic fractions 7. <u>Algebraic fractions</u> Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen their understanding and the understanding and the understanding of others  Problem-Solving  These topics naturally lend themselves to the specific problem based questions in these specific problem based questions in these are	Expanding and factorising Sequences Sequences Further develops in Y13: Binomial expansion, including partial fractions  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge paps for the AP3 should be used for ARI. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity  Students should be encouraged to create	Cosine Rule  Area of triangle (sine rule)  Graphs of sine, cosine and trangent  Further develops in Y13:  Trigonometry functions  Trigonometry and modelling  2. Builds from KS4:  Trigonometry and modelling  2. Builds from KS4:  Trigonometry in right-angled triangles  Further develops in Y13:  Trigonometry and modelling  3. Builds from KS4:  Column vectors  Granther develops in Y13:  Vectors in 30  End of unit assessments using the Pearson active learn resources  Grathude  Students should be taught about the work of early mathematicians and scientifies and should be encouraged to show grathude for the work that these pioneers have done to benefit us and humanity.  Staying Positive  When tackling some of the newer concepts,	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is an and cos Differentiating exponentials and logarithms Chain rule Product rule Quotent rule Quotent rule Implict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech This is one of the topics that students find tricky. They should be enouraged to demonstrate good speech and be open about how they are finding the topic and to share ideas on how to tackle problems.  Speaking  Students whould be encouraged to speak	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from K54.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it, will be important for students to demonstrate good temper! This like differention is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops in Y12; Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gap for the AP3 should be used for Aft in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.  Almi  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged to aim high in order to meet/exced their	Cumulative Frequency Box Piots Histograms 2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation Mutually Eculusive Events Tree Diagrams Mutually Eculusive Events Tree Diagrams Further develops in Y13: Normal distribution Conditional probability A. Further develops in Y13: Normal distribution Additional testing for the different ways in which data can be represented. Discossion on the suitability of graphs will be key to students self mastery of these concepts Students will need to focus on revision for the AP3 assessment which will be taking place during the next few weeks. Past earn places and model soultons should be made	Independent Research Projects and Drawing Conclusions  Further develops in Y13:  Further develops in Y13:  Linits  Junits  Jun	Differentiation integration  2. <u>Builds from Y12</u> . Algebraic methods  3. <u>Builds from Y12</u> . Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gaps for the AP3 should be used for ARI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly areas for development over the summer break.  Teamwork  There will be some opportunity for some practical based activities when studying
n for	Skill Skill	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Further develops in Y13: Algebraic Methods Binomial Expansion Friendliness & Civility  Students will demonstrate Friendliness and civility as they help each other to revise and civility	Simultaneous Equations Inequalities Further develops in Y13: Differentation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Sketching Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs State of Graphs St	yemset 2. Builds from KS4: Circle theorems Further develops in Y13: Radians 3. Builds from KS4: Algebraic fractions Further develops in Y13: Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brane in terms of tackling new topics. They should be encouraged to make and share nicitakes that they are making in order to deepen their understanding and the understanding and the understanding and the should be specified by the should be specified problem Solving  These topics naturally lend themselves to the skill of problem Solving and their will be specific problem based questions in these	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction.  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity  Students should be encouraged to create their own questions based on given	Cosine Rule  Area of triangle (sine rule)  Graphs of sine, cosine and tangent  Further develops in Y13:  Trigonometry functions  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  3. Builds from ESA  Column vectors  Further develops in Y13:  Vectors in 3D  End of unit assessments using the Pearson active learn resources  Gratitude  Students should be taught about the work of early mathematicians and soleritists and should be encouraged to show gardtude for the work that these pioneers have done to benefit us and humanity.  Staping Positive  When tackling some of the newer concepts, students should stay positive in order to be students of the newer concepts, students should stay positive in order to be students and suppositive in order to be students should stay positive in order to be students.	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is an and cos Differentiating exponentials and logarithms Chain rule Product rule Quotent rule Quotent rule Implict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and be open show how they are finding the topic and to share ideas on how to tackle problems.  Speaking  Students whould be encouraged to speak through problems and share solutions to the rest of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper This like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper, staying positive will be important when tackling the more complex problems	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops: in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.  Aimi  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged	Cumulative Frequency Box Piots Histograms 2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. Builds from KS4: Scatter Graphs Hypothesis testing for correlation 3. Builds from KS4: Calculating Probability Venn Diagrams Mutually Exclusive Events Tree Diagrams Tree Diagrams Scatter Graphs Tree Diagrams Legal Conditions in Y13: Conditional probability A Further develops in Y13: Normal distribution End of unit assessments using the Pearson active learn resources  This is an opportunity for students to master their understanding of the different ways in which dafa can be represented. Discoss on the suitability of graphs will be key to students self mastery of these concepts  Students will need to focus on revision for the AP3 assessment which will be taking piece during the next few weeks. Past exam	Independent Research Projects and Drawing Conclusions  Further develops in Y13:  Further develops in Y13:  Linits  Junits  Jun	Differentiation integration  2. <u>Builds from Y12</u> . Algebraic methods  3. <u>Builds from Y12</u> . Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gaps for the AP3 should be used for ARI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly areas for development over the summer break.  Teamwork  There will be some opportunity for some practical based activities when studying
for	8. h Link to Skill Skill is	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Further develops in Y13: Algebraic Methods Foroi Binomial Expansion Binomial Expansion Binomial Expansion Binomial Expansion Charles Country Country Country Country Country Country Friendliness & Civility  Friendliness & Civility  The opportunity to Angle And are Friendliness & Civility  Students will demonstrate friendliness and civility as they help each other to revise and improve on their algebraic knowledge from S.4.  Listening  Students will need to listen carefully to understand how their previous learning will understand how their previous learning will be a stretched and fallenge in algebra. Additionally, there is new content in quadratics that will be challenging if students  Bud Country Bud Coun	Simultaneous Equations Inequalities Further develops in Y13: Differentiation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Sketching Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs State of Graphs S	yemset 2. <u>Builds from KS4</u> . Crifed theorems Fyrther develops in Y13: Radians 3. <u>Builds from KS4</u> . Algebraic fractions 7. <u>Algebraic fractions</u> Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen their understanding and the understanding and the understanding of others  Problem-Solving  These topics naturally lend themselves to the specific problem based questions in these specific problem based questions in these are	Expanding and factorising Sequences Further develops in Y33: Binomial expansion, including partial fraction.  End of unit and reflection on the AP1 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity  Students should be encouraged to create their own questions based on given	Cosine Rule  Area of triangle (sine rule)  Graphs of sine, cosine and tangent  Further develops in Y13:  Trigonometry functions  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  3. Builds from ESA  Column vectors  Further develops in Y13:  Vectors in 3D  End of unit assessments using the Pearson active learn resources  Gratitude  Students should be taught about the work of early mathematicians and soleritists and should be encouraged to show gardtude for the work that these pioneers have done to benefit us and humanity.  Staping Positive  When tackling some of the newer concepts, students should stay positive in order to be students of the newer concepts, students should stay positive in order to be students and suppositive in order to be students should stay positive in order to be students.	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is an and cos Differentiating exponentials and logarithms Chain rule Product rule Quotent rule Quotent rule Implict differentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find tricky. They should be encouraged to demonstrate good speech and be open show how they are finding the topic and to share ideas on how to tackle problems.  Speaking  Students whould be encouraged to speak through problems and share solutions to the rest of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther stort of the group in order to build ther	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper This like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper, staying positive will be important when tackling the more complex problems	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops: in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gap for the AP3 should be used for Aft. in the lessons  Self-4  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.  Aimi  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged to aim high in order to meet/exceed their target grades for the next round of	Cumulative Frequency Box Piots Histograms 2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. Builds from KS4: Scatter Graphs Hypothesis testing for correlation 3. Builds from KS4: Scatter Graphs Hypothesis testing for correlation 3. Builds from KS4: Scatter Graphs Hypothesis testing for correlation Hypothesis testing for correlation Hypothesis testing for correlation Hypothesis testing for correlation Hypothesis testing Hypothesis tes	Independent Research Projects and Drawing Conclusions  Further develops in Y13:  Further develops in Y13:  Linits  Junits  Jun	Differentiation integration  2. <u>Builds from Y12</u> . Algebraic methods  3. <u>Builds from Y12</u> . Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gaps for the AP3 should be used for ARI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly areas for development over the summer break.  Teamwork  There will be some opportunity for some practical based activities when studying
Preparation for Work	to Skill Skill	Indices  Expanding and Factorising  Surds  Further develops in Y13:  Algebraic Methods  Proof  Binomial Expansion  Binomial Ex	Simultaneous Equations Inequalities Further develops in Y13: Differentation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs Students will learn resources  Justice & Truthfulness  Students will look at how graphs and scales can be manipulated to hide the 'truth'  Leadership  Students will lead in their own learning as they build upon their previous KS4 learning to expand into this Y12 AS content  Social Moral	yemsec 2. Builds from KS4: Cricle theorems Further develops in Y13: Radians 3. Builds from KS4: Algebraic fractions Proof Further develops in Y13: Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen their understanding and the understand of others  Problem-Solving  These topics naturally lend themselves to the specific problem shoring and their will be specific problem shorted put in these topics for the students to try. These are denoted P in the text books	Expanding and factorising Sequences Sequences Further develops in Y13: Binomial expansion, including partial fraction: Binomial expansion, including partial fractions assessment. Past exam questions to fill assessment. Past exam questions to fill sonvoledge paps for the P3 should be used for Aft in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP1 assessment period  Creativity  Students should be encouraged to create their own questions based on given prameters and mark schemes.	Cosine Rule  Area of triangle (sine rule)  Graphs of sine, cosine and tangent  Further develops in Y13:  Trigonometry functions  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  2. Builds from ESA  Trigonometry and modeling  3. Builds from ESA  Column vectors  Further develops in Y13:  Vectors in 3D  End of unit assessments using the Pearson active learn resources  Gratitude  Students should be taught about the work of early mathematicians and soleritists and should be encouraged to show gardtude for the work that these pioneers have done to benefit us and humanity.  Staping Positive  When tackling some of the newer concepts, students should stay positive in order to be students of the newer concepts, students should stay positive in order to be students and suppositive in order to be students should stay positive in order to be students.	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is an and cos Differentiating synnertials and logarithms Chain rule Product rule Quoteent rule Quoteent rule Implict differentiation Using second deviatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech This is one of the topics that students find tircky. They should be encouraged to demonstrate good speech and be open about how they are finding the topic and to share ideas on how to tackle problems.  Speaking  Students whould be encouraged to speak through problems and share solutions to the rest of the group in order to build their confidence in the still of speaking.	Areas on graphs Further develops in Y13: Further integration 2. <u>Builds from KS4.</u> Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper! This like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper; staying positive will be important when tackling the more complex problems and past exam questions	Sampling Types of Data  2. Builds from KS4: Averages and Range Futther develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gap for the AP3 should be used for Aft. in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.  Almin  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged to aim high in order to meet/fexceed their target grades for the next round of assessments.	Cumulative Frequency Box Piots Histograms 2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation 3. Builds from KS4: Scatcusting Probability Gallacisting Probability Murtally Edulative Events Tree Diagrams Further develops in Y13: Conditional probability 4. Further develops in Y13: Stommal distribution active learn resources  Wastery  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discossion on the suitability of graphs will be key to students self mastery of these concepts  Students will need to focus on revision for the AP3 assessment which will be taking paice during the next few weeks. Past employers and model southors should be enade available for students to help develop their exam skills.	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y13: Hypothesis testing for zero correlation 2. Builds from KS4: Units Vectors 3. Builds from KS4: Vectors Further develops in Y12: Variable acceleration in one dimension 4. Builds from KS4: Vectors Further develops in Y13: Forces and Friction Application of Forces AP3 Assessment - Whole School Data Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around the AP3 end of year assessemts.  Students will assess the sill of good speech during this month as they discuss new learning and in particular hypothesis testing.	Differentiation integration  2. <u>Builds from Y12-</u> Algebraic methods  3. <u>Builds from Y12-</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gaps for the AP3 should be used for AtI. in the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly areas for development over the summer break.  Teamwork  Teamwork  There will be some opportunity for some practical based activities when studying acceleration as part of the mechanics units.
Preparation for Work	8. h Link to Skill Skill is	Indices  Expanding and Factorising Surds  Further develops in Y13: Algebraic Methods  Proof Binomial Expansion  Friendliness & Civility  Friendliness & Civility  Students will demonstrate friendliness and civility as they help each other to revise and mortally above as they help each other to revise and civility as they help each other to revise and civ	Simultaneous Equations Inequalities Further develops in Y13: Differentation and Integration 2. Builds from KS4: Cubic and Reciprocal Graphs Sketching Graphs Sketching Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs Furthers develops in Y13: Functions and Graphs Students will lead in their own learning as the Students will look at how graphs and scales can be manipulated to hide the 'truth' Leadership Students will lead in their own learning as they build upon their previous KS4 learning to expand into this Y12 AS content Social Moral Democracy Students will see their social skills as they	yemset 2. <u>Builds from KS4</u> . Crifed theorems Further develops in Y13: Radians 3. <u>Builds from KS4</u> . Algebraic fractions Greated fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and haten mistakes that collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and haten mistakes that understanding an other bedgeen their developed to the state of the should be should	Enpanding and factorising Sequences Sequences Further develops in Y33: Binomial expansion, including partial fraction  assessment, Past exam questions to fill including partial fractions of the AP3 should be used for AH1 in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and emotionally around the AP3 assessment period  Creativity  Students should be encouraged to create their own questions to based on given prameters and mark schemes.	Cosine Rule Area of triangle (sine rule) Graphs of sine, cosine and tangent Further develops in Y13: Trigonometry functions Trigonometry and modelling 2. Builds from X5: Trigonometry and modelling 3. Builds from X5: Trigonometry and modelling 3. Builds from X5: Column vectors Further develops in Y13: Vectors in 3D End of unit assessments using the Pearson active learn resources Gratitude  Students should be taught about the work of early mathematicians and soleritrists and should be encouraged to show gratifude for the work that these pioneers have done to benefit us and humanity.  Students should stay positive in order to be resilient and complete longer problems  Social Individual Liberty  Students will need to respect the individual Students will need to respect the individual	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is and cos Differentiating synner develops in Y13: Differentiating exponentials and logarithms Chain rule Quoteten rule Quoteten rule Remember definerentiation Using second derivatives Rates of change  End of unit assessments using the Pearson active learn resources  Good Speech  This is one of the topics that students find turky. They should be encouraged to demonstrate good speech and the open about how they are finding the topic and to share does on how to tackle problems.  Speaking  Students whould be encouraged to speak through problems and share solutions to the rest of the group in order to build their confidence in the skill of speaking.  Social Individual Liberty In this topic the idea of individual liberty is	Areas on graphs: Further develops in Y13: Further integration 2. Builds from KS4: Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper! This like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper; staying positive will be important when tackling the more complex problems and past exam questions  Social Tolerance The value of tolerance fits nicely with the	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Further develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gap for the AP3 should be used for ANL in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this still during work on statistics as it is introduced this year.  Almi  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged to aim high in order to meet/fexeed their target grades for the next round of assessments.  Social Individual Libery  Students should have the right to review their	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation Mutually Eculusive Events Free Diagrams Further develops in Y13: Conditional probability  4. Further develops in Y13: Normal distribution Further develops in Y13: Normal distribution How Hypothesis testing the Pearson active learn resources  Asstery  This is an opportunity for students to master their understanding of the different ways in which dara can be represented. Discossions on the suitability of graphs will be key to students self mastery of these concepts  Students will need to focus on revision for the AP3 assessment which will be taking place during the next few weeks. Past exam pagers and model southors should be made available for students to help develop their exam skills.  Social  Rule of Law  There is an opportunity here to look at	Independent Research Projects and Drawing Conclusions  Further develops in Y13:  Further develops in Y14:  Lints	Differentiation integration 2. <u>Builds from Y12</u> . Algebraic methods 3. <u>Builds from Y12</u> . Graphs and transformations 3. <u>Builds from Y12</u> . Graphs and transformations 4. <u>Builds from Y12</u> . Graphs and transformations 5. <u>Builds from Y12</u> . Graphs and transformations 5. <u>Builds from Y12</u> . Graphs and transformations 16. Builds from Y12. Graphs and transformations 16. Builds for AP3 should be used for Aft. In the lessons 6. Good Sense 5. Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify areas of strength and more importantly areas for development over the summer break.  Teamwork  Teamwork  There will be some opportunity for some practical based activities when studying acceleration as part of the mechanics units.  Social Tolerance In starting the AZ content students will need
Preparation for Work	8. h Link to Skill Skill is	Indices Expanding and Factorising Surds Further develops in Y13: Algebraic Methods Proof Binomial Expansion Binomial Expansion Binomial Expansion Use Company of Proof Binomial Expansion Binomial Expansion Binomial Expansion Binomial Expansion Binomial Expansion William Solving quadratics Quadratic graphs Functions and graphs Students will demonstrate friendliness and civility as they help each other to revise and continuoly above on Expansion Binomial Bin	Simultaneous Equations Inequalities   Further develops in Y13:   Differentiation and Integration   2. Builds from KS4:   Cubic and Reciprocal Graphs   Sketching Graphs   Furthers develops in Y13:   Functions and Graphs   Furthers develops in Y13:   Functions and Graphs   Sketching Graphs   Furthers develops in Y13:   Functions and Graphs   Sketching Graphs   Sketching Graphs   Sketching Graphs   Justice & Truthfulness   Students will look at how graphs and scales can be manipulated to hide the 'truth'   Leaderphip   Students will lead in their own learning as they build upon their previous KS4 learning to expand into this Y12 AS content   Social Moral   Democracy   Students will be their social skills as they complete paired and group activities.   Students will lead to a the moral reprevious Students will look at the moral reprevious Students will look at the moral reprevious of the students will look at the moral reprevious in the students will look at the moral reprevious for the students will look at the moral reprevious for the students will look at the moral reprevious for the students will look at the moral repressions the students will look at the moral re	yemset 2. <u>Builds from KS4</u> . Crifed theorems Fyrther develops in Y13: Radians 3. <u>Builds from KS4</u> . Algebraic fractions Fyrond F	Expanding and factorising Sequences Sequences Further develops in Y13: Binomial expansion, including partial fraction: Binomial expansion, including partial fractions of the P1 assessment. Past exam questions to fill is assessment. Past exam questions to fill is assessment. Past exam questions to fill is assessed partial for the P3 should be used for Aft in the lessons  Generosity  Students should be generous with their time in order to support each other both academically and meditorally around the AP1 assessment period  Creativity  Students should be generous generous with their time in order to support each other both academically and meditorally around the AP1 assessment period  Creativity  Students should be generous	Cosine Rule Area of triangle (sine rule) Graphs of sine, cotine and tangent Further develops in Y13: Trigonometrix functions Trigonometry and modelling 2. Builds from KS4: Trigonometry and modelling 3. Builds from KS4: Trigonometry and modelling 3. Builds from KS4: Column westors Further develops in Y13: Vectors in 3D End of unit assessments using the Pearson active learn resources Gratitude  Students should be taught about the work of early mathematicians and scientists and should be encouraged to show gratitude for the work that these ploneers have done to benefit us and humanity.  Students should be taught about the work of early mathematicians and scientrists and should be encouraged to show gratitude for the work that these ploneers have done to benefit us and humanity.  Students will need to respect the individual Liberty  Social Individual Liberty  Sudients will need to respect the individual liberties of others when they are being creative and working on problems and	Quadratic graphs Further develops in Y13: Differentiating is and cos Differentiating is and cos Differentiating is and cos Differentiating part of the control of the contr	Areas on graphs Further develops in Y13: Further integration 2. Builds from KS4: Solving equations  AP2 Assessment - Whole School Data Collection Review Exercise 3  Good Temper & Humour  Tackling integration for the first time, it will be important for students to demonstrate good temper in his like differentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper, staying positive will be important when tackling the more complex problems and past exam questions  Social Tolerance The value of tolerance fits nicely with the virtue of good temper in particular. Students should be encouraged to work collaboratively	Sampling Types of Data  2. <u>Builds from KS4</u> . Averages and Range Enther develops in Y12: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for ARI. in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mistery of this skill during work on statistics as it is introduced this year.  Almi  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged to alm high in order to meet/sceed their target grades for the next round of assessments.  Social  Individual Libery  Students should have the right to review their own learning from the AP assessment and their individual libery should be observed by	Cumulative Frequency Box Piots Histograms 2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation Hypothesis testing Hypothesis Further develops in Y13: Conditional probability A. Further develops in Y13: Normal distribution Further develops in Y13: Normal distribution Hope of the Pearson active learn resources  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discoving which data can be represented. Discoving which data can be represented. Discoving their develops in Y13: Students will need to focus on revision for the AP3 assessment which will be taking place during the next few weeks. Past earn papers and model soultions should be made available for students to help develop their exam skills.  Social  Rule of Law  There is an opportunity here to look at statistics in real contexts. Perhaps data on curt hearings or soutcomes of Yisia Scould be statistics in real contexts. Perhaps data on curt hearings or soutcomes of Yisia Scould be	Independent Research Projects and Drawing Conclusions Further develops in Y13: Further develops in Y14: Hypothesis testing for zero correlation  2. Builds from KS4: Units Vectors 3. Builds from KS4: Further develops in Y13: Variable acceleration in one dimension  4. Builds from KS4: Variable acceleration in one dimension  4. Builds from KS4: Vectors Further develops in Y13: Forces and Friction Application of Forces  AP3 Assessment - Whole School Data Collection  Compassion  Students will consider compassion for each other at the potentially stressful time around the AP3 end of year assessemts.  Speaking  Students will have the apportunity to demonstrate the sill of good speech during this month as they discuss new learning and in particular hypothesis testing.  Rule of Law  Having focused on British rules of law in the previous month when dealing with statistics and probability there is a nine opportunity to read proportunity there is a nine opportunity to social months and the previous month when dealing with statistics and probability there is a nine opportunity to proportunity to the previous month when dealing with statistics and probability there is a nine opportunity to proportunity to pro	Differentiation integration  2. <u>Builds from Y12</u> Algebraic methods  3. <u>Builds from Y12</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge gap for the AP3 should be used for ARI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify rases of strength and more importantly areas for development over the summer break.  Teamwork  Teamwork  There will be some opportunity for some practical based activities when studying acceleration as part of the mechanics units.  Social  Tolerance  In starting the AZ content students will need to be particularly tolerant of each other and also staff when tackling new and unfamiliar
Preparation for Work	8. h Link to Skill Skill is	Indices  Expanding and Factorising  Surds  Further develops in Y13:  Algebraic Methods  Further develops in Y13:  Algebraic Methods  Further develops in Y13:  Algebraic Methods  Proof  Binomial Expansion  2. Builds from K54:  Solving quadratics  Quadratic graphs  Functions and graphs  Functions and graphs  Functions and graphs  Functions and graphs  Continuely above on  Brise.  Students will demonstrate friendliness and  civility as they help each other to revise and  improve on their algebraic knowledge from  K54.  Listening  Students will need to listen carefully to  understand how their previous learning will  improve on their algebraic knowledge from  K54.  Listening  Students will need to listen carefully to  understand how their previous learning will  additionally, there is new content in  quadratics that will be challenging if students  do not listen.  Social  Rule of Law  Students will use their social skills to work  together in groups and pairs to develop their  together in groups and pairs to develop their  social and socia	Simultaneous Equations Innequalities   Further develops in Y13: Differentiation and Integration   2. Builds from K54: Cubic and Reciprocal Graphs   Stetching Graphs   Furthers develops in Y13: Furthers develops in Y14: Furthers develops in Y14: Furthers develops in Y15: Furthers develops in Y16: Further	yemsec 2. Builds from KS4: Circle theorems Further develops in Y13: Radians 3. Builds from KS4: Algebraic fractions Proof Surther develops in Y13: Algebraic fractions Further develops in Y13: Algebraic methods  AP1 Assessment - Whole School Data Collection  Courage  Students will need to be brave in terms of tackling new topics. They should be encouraged to make and share mistakes that they are making in order to deepen their understanding and the understanding of others  Problem-Solving  These topics naturally lend themselves to the skill of problem solving and their will be specific problem based questions in these topics for the students to try. These are denoted P in the text books  Social Tolerance Students will need to demonstrate social skills when working together on problems. 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Builds from KS5:  Column vectors  Trigonometry and modeling  3. Builds from KS5:  Column vectors  Trigonometry and modeling  4. Builds from KS5:  Column vectors  Trigonometry and modeling  5. Builds from KS5:  Column vectors  Trigonometry and modeling  6. Builds from KS5:  Column vectors  Trigonometry and modeling  5. Builds from KS5:  Column vectors  Gratitude  Students should be taught about the work of early mathematicians and scientrists and should be encouraged to show gratitude for the work that these pioneers have done to benefit us and humanity.  Students should stay positive in order to be resilient and complete longer problems  Social Individual Liberty  Students will need to respect the individual bilberties of others when they are being creative and working on problems and questions created by others.  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In Bill Bed ifferentiation is a tricky topic when first introduced and students will need to remain open minded  Staying Positive  Matching well with the virtue of good temper; students will need to remain open minded students will need to remain open minded and students will need to remain open minded and past exam questions  Associal Tolerance  The value of tolerance fits nicely with the virtue of good temper in particular. Students should be encouraged to work collaboratively and to respect each other on problem solving. Where issues or conflict arises students should remind themselves of the need for tolerance of the views and approach to the problem solving. Where issues or conflict arises students should remind themselves of the need for tolerance of the views and approach to the problem solving. Where issues or conflict arises students should remind themselves of the need for tolerance of the views and approach	Sampling Types of Data  2. Builds from KS4: Averages and Range Futther develops in Y13: Normal distribution  End of unit and reflection on the AP2 assessment. Past exam questions to fill knowledge gaps for the AP3 should be used for Aft. in the lessons  Self-1  Students will have some skills for data collection from GCSE. This will be an opportunity for the students to focus on mastery of this skill during work on statistics as it is introduced this year.  Almin  Students will need to reflect carefully on the AP2 exam results and use these as the basis of their revision. They should be encouraged as in high in order to metel/exceed their target grades for the next round of assessments.  Social  Individual Libery  Students should have the right to review their own learning from the AP assessment and their individual libery should be observed by others. Some students may need longer and more support to review assessments and this should be linked to the idea of individual liberty and everyones right to have quality	Cumulative Frequency Box Piots Histograms  2. Builds from KS4: Scatter Graphs Further develops in Y13: Measuring correlation Hypothesis testing for correlation Mutually Eculusive Events Tree Diagrams Further develops in Y13: Normal distribution Further develops in Y13: Normal distribution Hope Hypothesis testing for Pearson active learn resources  Mastery  This is an opportunity for students to master their understanding of the different ways in which data can be represented. Discoss on the suitability of graphs will be key to students self mastery of these concepts  Students will need to focus on revision for the AP3 assessment which will be key to students self mastery of these concepts  Students will need to focus on revision for the AP3 assessment which will be taking place during the next few weeks. Past earn appears and model soultions should be made available for students to help develop their exam skills.  Social  Rule of Law  There is an opportunity here to look at statistics in real contexts. Perhapp data on court hearings no contones of trials could be a focus in lessons. There could then be a focus in lessons. The could then	Independent Research Projects and Drawing Conclusions  Further develops in Y13:  Further develops in Y13:  Hypothesis testing for zero correlation  2. Builds from KS4:  Units  Vectors  3. Builds from KS4:  Velocity-Time Graphs  Further develops in Y13:  Variable acceleration in one dimension  4. Builds from KS4:  Vectors  Variable acceleration in one dimension  4. Builds from KS4:  Vectors  Federal  Vectors  Federal  Vectors  Federal  Forces and Friction  Application of Forces  Application of Forces  AP3 Assessment - Whole School Data  Collection   Compassion   Students will consider compassion for each  other at the potentially stressful time around  the AP3 end of year assessemts.  Speaking   Students will have the opportunity to  demonstrate the skill of good speech during  this month as they discuss new learning and  in particular hypothesis testing.  Social  Rule of Law  Hawing focussed on British rules of law in the  previous month when dealing with statistics  and probability there is a nike opportunity for  demonstrate the sill of good speech during  Social  Rule of Law  Hawing focussed on British rules of law in the  previous month when dealing with statistics  and probability there is a nike opportunity for  some  great discussions around freedom of choice  and betwood in a universe which for some  great discussions around freedom of choice  and betwood in a universe which for  some  production of force  and province  for the force  for the  force  force  for the force  for the  force  for the  force  f	Differentiation integration  2. <u>Builds from Y12</u> Algebraic methods  3. <u>Builds from Y12</u> Graphs and transformations  End of unit and reflection on the AP3 assessment. Past earn questions to fill knowledge ago for the AP3 should be used for ARI. In the lessons  Good Sense  Students will be reviewing the AP3 results and will need to demonstrate good sense in order to identify rases of strength and more importantly areas for development over the summer break.  Teamwork  Teamwork  There will be some opportunity for some practical based activities when studying acceleration as part of the mechanics units.  Social  Tolerance  In starting the AZ content students will need to be particularly tolerant of each other and also staff when tackling new and unfamiliar content which will challenge understanding.