

SUBJECT: MATHEMATICS – Higher Pathway - Upper

Rationale Develop confidence and fluency with numerical and algebraic techniques and problem solving. To use a scientific calculator effectively. To develop further geometrical skills and techniques that support problem solving. To use a scientific calculator effectively. To develop further geometrical skills and techniques that support problem solving. Summer Term Summer Te	Year Group	Year 8						
Topic/Unit Autumn Term 1 Autumn Term 2 Spring Term 3 Summer Term 3 Summer Term 4 Reciproal 2 A Node Parcallage Probability 9 Parcale (Lines 8 Find term 4 Find the Graphs 5 Summer Term 4 Summer Term 4 Autum 1 Reciproal 2 Parcal 2 A Parcal 2 A Reciproal 2 Parcal 2 A Reciproal 2 Parcal 2 <td< th=""><th>Rationale</th><th>Develop confidence scientific calculato</th><th>ce and fluency with r effectively. To dev</th><th>numerical and algorithms relop further geom</th><th>ebraic techniques an etrical skills and tec</th><th>nd problem solving. hniques that suppor</th><th>To use a t problem solving.</th></td<>	Rationale	Develop confidence scientific calculato	ce and fluency with r effectively. To dev	numerical and algorithms relop further geom	ebraic techniques an etrical skills and tec	nd problem solving. hniques that suppor	To use a t problem solving.	
Knowledge • Reverse 8 • Probability • Porporting 8 • Circles • Proportion g& Solving 9 • Ratio & Craphs • Solving 9 • Scatter • Circle Graphs • SD Shapes • Reciprocal & Circle Graphs Skills Reverse Parcentages Use a multiplier or circle Graphs • Determage 6 a arount and to find a percentage 6 a arount and to segreater indices when multiplying decimal percentage find the original medical karound to segreater indices when multiplying decimal percentage indices and to segreater indices when multiplying decimal percentage indices and to segreater indices when multiplying decimal percentage indices and to segreater indices when multiplying brackets (raising given decimal percentage indices and percentage indices and trates of a correlation indices when multiplying brackets (raising brackets (raising br	Topic/Unit	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2	
SkillsReverse Percentages & Multipliers Use a multiplier to find a percentage of an amount and to increase or decrease by decrease by decrease ser decrease ser information and relative increase or dinders detained the number of times information and relative information and relative information and relative information and relative indices when system indices when s	Knowledge	 Reverse Percentages & Multipliers Index Laws & Further Factorising Quadratic Sequences 	 Probability Polygons, Angles & Parallel Lines Indices, Roots & Order of Operations 	 Circles Representin g & Solving Inequalities Pythagoras' Theorem 	 Ratio & Proportion Plotting & Naming Linear Graphs Quadratic & Cubic Graphs 	 Scatter Graphs 3D Shapes 	 Reciprocal & Circle Graphs Similarity in 2D 	
or is prime. properties. Factorise a Find missing range of simple	Skills	Reverse Percentages & Multipliers Use a multiplier to find a percentage of an amount and to increase or decrease by a percentage (including decimal percentages and those greater than 100%) Find the original amount after a percentage increase or decrease. Index Laws & Further Factorising Use the laws of indices when multiplying or dividing with algebraic terms. Use index laws involving brackets (raising a power to a power) and the power 0. Use index laws including fractional and negative powers. Factorise a quadratic expression by grouping in pairs. Factorise a quadratic where the 'a' term is 1 or is prime. Factorise a	ProbabilityWriteprobabilitiesusing fractions,percentages ordecimals.Know and usethe fact that thesum of allmutuallyexclusive eventsis 1, to solve arange ofproblems.Estimate thenumber of timesan event willhappen fromgiveninformation andrelativefrequency.Find theprobability ofsuccessiveevents.List all outcomesfrom single andcombinedevents.Draw and usesample spacediagrams.Draw and usetwo-way tablesto calculateconditional andunconditionalprobability.Polygons,Angles &Parallel LinesClassifytriangles andquadrilateralsfrom a range ofgeometricproperties.Find missing	Circles Identify, define and draw parts of a circle. Use the formulae for circumference and area of a circle, giving decimal answers. Find the area and/or perimeter of partial circles and composite shapes. Find the radius or diameter when given the area of circumference. Representing & Solving Inequalities Show inequalities on number lines using open and closed circles. Write down all integers that satisfy a given inequality. Solve linear inequalities in one variable, in a range of situations including 'double inequalities' such as 10 > 2x > 20.	Ratio & Proportion Write ratios from a range of given information. Simplify ratios including the use of unitary form. Divide a quantity in a given ratio. Use a ratio to find one quantity when the other is known. Interchange between fractions and ratios. Write a ratio as a linear function. Compare scale models to real life measure- ments, including to make estimates. Convert between currencies in a range of contexts. Manipulate recipes in a range of contexts. Solve proportion problems using the unitary method. Work out and justify which product offers the best value for money.	Scatter Graphs Set up axes and plot a scatter graph. Identify outliers and consider what they show. Distinguish between positive, negative and zero correlation. Interpret a scatter graph in terms of the relationship of the two variables, using correlation and a real-life context. Draw a line of best fit, by eye, in order to support correlation. Find the equation of the line of best fit. Understand that correlation does not imply causality. Use a line of best fit to make predictions, understanding the difference in reliability in interpolation and extrapolation.	Reciprocal & Circle Graphs Recognise a linear, quadratic, cubic, reciprocal or circle graph from its shape. Draw circles with a centre at the origin, in the form $x^2 + y^2 = r^2$ Draw graphs of the reciprocal function $y = 1/x$ with $x \neq 0$, using a table of values. For reciprocal graphs be able to state the value of x for which the equation is not defined. <u>Similarity in 2D</u> Write the lengths of two shapes as a ratio in its simplest form. Understand the conditions that make shapes similar, for both lengths and angles. Prove that two shapes are similar using angle properties and/or enlarge- ment. Identify the scale factor that links similar shapes and use it to find missing lengths in a range of simple	

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	the difference of	different	Pythagoras'	Plotting &	<u>3D Shapes</u>	and more
	two squares.	triangles and	<u>Theorem</u>	Naming Linear	Sketch and	complex
	Simplify	quadrilaterals as	Understand	<u>Graphs</u>	identify 3D	situations
	algebraic	well as more	and use	Plot and draw	shapes.	(including the
	fractions by first	complex	Pythagoras'	graphs of the	Sketch and	use of fractional
	factorising.	composite	theorem to find	form $ax + by = c$.	identify places of	scale factors)
	Quadratic	shapes/	missing	Identify and	symmetry on a	
	Sequences	diagrams.	lengths in	interpret	range of 3D	
	Find the nth	Use the angle	given right	gradient and	shapes.	
	term of a	properties of	angle triangles	intercept from	Draw plans,	
	quadratic	parallel lines to	– tor a	graphs of the	front elevations	
	sequence.	find missing	hypotenuse	form $ax + by = c$.	and side	
	Continue a	angles	and other	Find the	elevations of	
	quadratic	(alternate,	shorter side.	equation of a	different 3D	
	sequence or find	corresponding,	Justity whether	line through one	snapes.	
	a specific term,	co-interior)	a triangle is	point with a	Given the front	
	Including by	giving clear	right-angled	given gradient.	elevation, side	
	using the hth	Identify and use	using Duthogeree'	the feet that	elevation and	
	Use the oth term	vortically	r yulayolas		draw the 2D	
	to dependence of		Calculate the	parallel graphs	shape	
	sequence and to	Indices Poots ?	length of line	aradient	shape.	
	deduce whether	Order of	segments	Quadratic &		
	a specific	Operations	aiven their end	Cubic Graphs		
	number annears	Use index	coordinates	Use tables of		
	in a given	notation	Manipulate	values to		
	sequence.	including	other shapes	generate sets of		
		negative	in order to use	coordinates to		
		powers.	Pvthagoras'	represent		
		Recognise	theorem.	guadratic and		
		powers of 2, 3,		cubic graphs.		
		4, 5 and 10.		Plot and		
		Estimate square		construct		
		or cube roots		quadratic and		
		using knowledge		cubic graphs		
		of square and		accurately.		
		cube numbers.		Read from		
		Recognise and		graphs to find		
		use the		approximate		
		equivalence in		solutions to		
		base numbers in		quadratic and		
		order to solve		cubic equations.		
		problems.		Estimate the		
		Use BIDMAS		gradient at a		
		correctly,		point, on a		
		including		quadratic or		
		appreciating the		cubic graph.		
		USE Of		Estimate the		
		negatives.		area under a		
		Use a calculator		quadratic graph		
		correctly to		by aiviaing it into		
		evaluate with		trapezia.		
		indices and				
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SUBJECT: MATHEMATICS – Higher Pathway - Lower

Year Group	Year 8						
Rationale	Develop further co	onfidence and fluend	cy with numerical a	and algebraic techni	ques and problem s	solving. To use a	
Topic/Unit	Autumn Term 1	Autumn Term 2	Spring Term	Spring Term 2	Summer Term	Summer Term	
Knowledge	 Percentages 	 Probability 	■ Circles	 Ratio & 	Scatter	2Similarity in	
	& Multipliers	 Polygons& Angles 	 Representin a & Solving 	Proportion	Graphs	2D Working with	
	Further	 Indices, Roots 	Inequalities	Naming &	- OD Onapes	Grouped Data	
	Factorising	& Order of	 Pythagoras' 	Using Linear			
	 Quadratic Sequences 	Operations	Theorem	Graphs			
	Ocqueriees			Cubic Graphs			
Skille	Doroontogoo 9	Drobobility.	Cirolog	Potio 8	Soottor Cropho	Similarity in 2D	
SKIIIS	Multipliers	Write	Identify, define	Proportion	Set up axes and	Write the	
	Use a multiplier	probabilities	and draw parts	Write ratios from	plot a scatter	lengths of two	
	to find a	using fractions,	of a circle.	a range of given	graph.	shapes as a	
	an amount and	decimals.	formulae for	Simplify ratios	and consider	simplest form.	
	to increase or	Know and use	circumference	including the	what they show.	Understand the	
	decrease by a	the fact that the	and area of a	use of unitary	Distinguish	conditions that	
	percentage (including	sum of all mutually	decimal or 'in	form. Divide a quantity	positive	make snapes similar for both	
	decimal	exclusive events	terms of pi'	in a given ratio.	negative and	lengths and	
	percentages and	is 1, to solve a	answers.	Use a ratio to	zero correlation.	angles.	
	those greater	problems.	or diameter	when the other	scatter graph in	shapes are	
		Find the	when given	is known.	terms of the	similar using	
	Index Laws &	probability of	the area of	Interchange	relationship of	angle properties	
	<u>Further</u> Factorising	successive	circumterence.	fractions and	the two variables using	and/or enlargement	
	Use the laws of	List all outcomes	Representing	ratios.	correlation and a	Identify the	
	indices when	from single and	& Solving	Compare scale	real-life context.	scale factor that	
	multiplying or	combined	Inequalities Show	models to real	Draw a line of	links similar	
	algebraic terms.	Draw and use	inequalities on	ments, including	in order to	it to find missing	
	Use index laws	sample space	number lines	to make	support	lengths in a	
	involving	diagrams.	using open	estimates.	correlation.	range of simple	
	a power to a	two-way tables	circles.	between	equation of the	complex	
	power) and the	to calculate	Write down all	currencies in a	line of best fit.	situations	
	power 0.	conditional and	integers that	range of	Understand that	(including the	
	including simple	probability.	inequality.	Manipulate	not imply	scale factors)	
	fractional and		Solve linear	recipes in a	causality.	,	
	negative	Polygons &	inequalities in	range of	Use a line of	Working with Groupod Data	
	Factorise a	Classify	in a range of	Solve proportion	predictions.	Find the modal	
	quadratic	triangles and	situations	problems using	understanding	class interval	
	expression of the form $x^2 + bx$	quadrilaterals	including	the unitary	the difference in	from a grouped	
	+ c where b and	geometric	inequalities'	Work out and	interpolation and	containing	
	c are positive	properties.	such as 10 >	justify which	extrapolation.	continuous data.	
	and negative.	Find missing	2x > 20.	product offers	3D Shapes	Find the class	
	quadratic	different	Pythagoras'	for money.	Sketch and	contains the	
	expression by	triangles and	Theorem		identify 3D	median, from a	
	grouping in	quadrilaterals as	Understand	Sketching,	shapes.	grouped	
	Factorise a	complex compo-	Pythagoras'	Linear Graphs	identify places of	containing	
	quadratic where	site shapes/	theorem to find	Know and use	symmetry on a	continuous data.	
	the 'a' term is 1	diagrams.	missing	the fact that	range of 3D	Find an estimate	
	Factorise a		given right	have the same	Draw plans.	from a grouped	
	quadratic using		angle triangles	gradient.	front elevations	frequency data	
	the difference of		– for a	Find the	and side	containing	
	two squares.	1	nypotentuse		elevations of	continuous data.	



	Simplify	Indices Roots 8	and other	straight line from	different 3D	Linderstand why
	algobraic	Order of	and Uner		shapos	the mean is only
	fractiona by first	Oncerctions	Shorter Side.	the form v my	Shapes.	the mean is only
	fractions by first	<u>Operations</u>		the form y = mx	Given the front	an estimate.
	ractorising	Use index	a triangle is	+ C. Okatab a linear	elevation, side	
		notation	right-angled	Sketch a linear	elevation and	
	quadratics of the	including	using	graph using the	plan be able to	
	form $x^2 + bx + c$	negative	Pythagoras	gradient and y-	draw the 3D	
	or $ax^2 + bx + c$	powers.	theorem.	intercept.	shape.	
	where 'a' is	Recognise	Calculate the	Find		
	prime).	powers of 2, 3,	length of line	approximate		
		4, 5 and 10.	segments,	solutions to a		
	<u>Quadratic</u>	Estimate square	given their end	linear equation		
	Sequences	or cube roots	coordinates.	from its graph.		
	Find the nth	using knowledge	Manipulate			
	term of a	of square and	other shapes	Quadratic &		
	quadratic	cube numbers.	in order to use	Cubic Graphs		
	sequence of the	Recognise and	Pythagoras'	Use tables of		
	form an ² or n ² +	use the	theorem.	values to		
	С.	equivalence in		generate sets of		
	Continue a	base numbers in		coordinates to		
	quadratic	order to solve		represent		
	sequence or find	simple		quadratic and		
	a specific term,	problems.		cubic graphs.		
	including by	Use BIDMAS		Plot and		
	using the nth	correctly,		construct		
	term.	including.		quadratic and		
	Use the nth term	appreciating the		cubic graphs		
	to generate a	use of		accurately.		
	sequence and to	negatives.		Read from		
	deduce whether	Use a calculator		graphs to find		
	a specific	correctly to		approximate		
	number appears	evaluate with		solutions to		
	in a given	indices and		quadratic and		
	sequence.	roots.		cubic equations.		
				Estimate the		
				area under a		
				quadratic graph		
				by dividing it into		
				trapezia.		
Assess-	Assessment 4	Assessment 5	Assessment 6		Assessment 7	EOY
ments			•			Assessment



SUBJECT: MATHEMATICS: Foundation Pathway - Upper

Rationale Develop further confidence with algebraic and geometrical techniques to support problem solving, and number skills. To use a scenation calculation more effectively. To increase functery with the manipulation of proportional reasoning and number skills. Top/C/L/IN Autumn Term 1 Autumn Term 2 Spring Term 1 Spring Term 1 Summer Term 2 Summer	Year Group	Year 8						
Topic/Unit Autumn Term 1 Autumn Term 2 Spring Term Spring Term Summer Term Summer Term Summer Term Summer Term Knowliedge • Working with Indices, Powers & Roots • Theoretical Probability and percentages • Circles • Representing g & Solving indices, Powers & Roots • Ratio & • Ratio & • Drawing • Relative • Probability Distinguish events as inpecable, were were as including processible, of profit and income tax caculations. • Ratio & • Ratio & • Drawing • Relative • Probability and draw parts of a circle, probability of profit and income tax caculations. • Ratio & • Drawing • Relative • Probability and draw parts of a circle, probability of profit and income tax caculations. 2D & 3D Shapes • Time • Drawing income tax caculations. • Draw circles and arcs to a given relative probability of an income tax caculations. • Ratio & • Draw circles and arcs to a given relative probability of an incuch gray parts including profit and percentages. 2D & 3D Shapes • Time • Draw circles and arcs to a given relative probability of an incuch gray parts including profit and percentages. • Draw circles marcs including profit and arcs to a given tradis. • Ratio & • Draw circles * Ratio & * Ratio	Rationale	Develop further co scientific calculato number skills.	nfidence with algeb r more effectively. T	raic and geometrie	cal techniques to su y with the manipulat	pport problem solvinion of proportional r	ng. To use a easoning and	
Knowledge • Working with Percentages Roots • Finders, Powers & Roots • Circles Percentages & Angles • Ratio & Percentages & Angles • Relative Percentages & Angles • Relative Percentages & Angles • Relative Percentages & Caster Graphs • 2D & 3D Shapes Skills Working with Percentages in events as quantity using a decimal of percentages in earlief contexts including price after VAT, value of profit and loss, simple interest and including price after VAT, value of profit and loss, simple interest and including price after VAT, value probability of an percentages in earlief contexts acaculations. Relative Percentages in events as and draw for arcs to a given probability of an event with including a part including a percentages for single events. • Ratio & Percentages interest and including appreciation of profit and loss, simple interest and including percentages of the probability of an event occurring. • Relative Probability of and draw for events. • 2D & 3D Shapes Express the draw in part including appreciation of acater profit and including appreciation of acater profit and including appreciation of acater profit and including appreciation of acater profit and including percentages of the probabilites in devertices on and side events. • Relative	Topic/Unit	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2	
Skrills Working with Find a quantity using a decimal multipler Inceretical Probability impossible, unikely, evens, includiang price certain. Circles and draw parts circle. Rato & circles Rato & procontion Rato & treature system Rato & treature probability of an arobability of the probability including price and row factors 2D & 3D shapes aradius or division of a Work out including write tincerest and including write tincerest and including write tincerest and including protabilities including protabilities including protabilities including protabilities including price aspects and vertices Rato & probability the probability and cosed Rato & treates Rato & treates Rato & treating probability and reas of an including price and vertices Rato & treating probability and reas of an including price and vertices Rato & treating probability and vertices Rato & treating pro	Knowledge	 Working with Percentages Working with Indices, Powers & Roots 	 Theoretical Probability Lines, Shapes & Angles 	 Circles Representin g & Solving Inequalities Application of Fractions 	 Ratio & Proportion Drawing Linear Graphs 	 Relative Frequency & Listing Outcomes Scatter Graphs 	 2D & 3D Shapes Time 	
negatives. Estimate angle y = x and y = -x. Understand that hours, minutes Use a calculator sizes Plot and draw correlation does or a mixture of	Skills	Working with Percentages Find a percentage of a quantity using a decimal multiplier Use percentages in real-life contexts including price after VAT, value of profit and loss, simple interest and income tax calculations. Working with Indices, Powers & Roots Use index notation including negative powers. Recognise powers of 2, 3, 4, 5 and 10. Recall the squares of 1 to 20 and cubes of 1, 2, 3, 4, 5 and 10. Use the laws of indices to multiply and divide numbers written in index notation. Evaluate expressions involving squares, cubes and roots using the four rules of arithmetic and index laws. Use BIDMAS correctly, including appreciating the use of negatives. Use a calculator	Theoretical Probability Distinguish events as impossible, unlikely, evens, likely and certain. Mark events on a probability scale. Write probabilities in words, fractions, decimals and percentages. Find the probability of an event occurring. List outcomes for single events. Work out probabilities from frequency tables. Use knowledge of mutually exclusive events to calculate missing probabilities or the probability of an event not happening. Lines, Shapes & Angles Use correct 3 or 2 letter notation for lines, angles and shapes. Identify and mark parallel and perpendicular lines. Describe measures of turn using angles, including clockwise and anti-clockwise. Estimate angle sizes	Circles Identify, define and draw parts of a circle. Use the formulae for circumference and area of a circle, giving decimal or 'in terms of pi' answers. <u>Representing</u> & Solving <u>Inequalities</u> Show inequalities on number lines using open and closed circles. Write down all integers that satisfy a given inequality. Solve simple linear inequalities in one variable, and represent the solution on a number line. <u>Application of Fractions</u> Add, subtract, multiply and divide fractions and mixed numbers in a range of different contexts. Find the reciprocal of an integer, decimal or fraction.	Ratio & ProportionExpress the division of a quantity in a ratio.Simplify ratios including writing ratios in unitary form.Share a quantity in a given ratio including 3 part ratios.Use a ratio to find one quantity when the other is known.Interchange between fractions and ratios.Compare scale models to real lifemeasurements, including to make estimates.Convert between currencies in a range of contexts.Manipulate recipes in a range of contexts.Solve proportion problems using the unitary method.Work out and justify which product offers the best value for money.Drawing Linear Graphs Draw and identify graphs parallel to the axes as well as y = x and y = -x.Plot and draw	RelativeFrequency &ListingOutcomesFind theprobability of anevent usingrelativefrequency.Estimate thenumber of timesan event willoccur given theprobability andthe number oftrials.Compareexperimentaland theoreticalprobabilities.List outcomessystematicallyfor combinedevents.Draw and usesample spacediagrams.Scatter GraphsSet up axes andplot a scattergraph.Identify outliersand considerwhat they show.Distinguishbetweenpositive,negative andzero correlation.Interpret ascatter graph interms of therelationship ofthe twovariables, usingcorrelation and areal-life context.Draw a line ofbest fit by eye,in order tosupportcorrelation.Understand thatcorrelation does	2D & 3D Shapes Draw circles and arcs to a given radius or diameter. Measure and draw line to the nearest mm. Know and use compass directions. Make accurate drawing of 2D shapes using a ruler and protractor. Sketch and identify 3D shapes. Find the number of faces, edges and vertices on a 3D shape. Sketch and identify places of symmetry on a range of 3D shapes. Draw plans, front elevations and side elevations of different 3D shapes. Given the front elevation, side elevation, side elevation and plan be able to draw the 3D shape. <u>Time</u> Use correct notation for 12 and 24-hour clock and convert between the two. Work out the time taken for a journey. Calculate time intervals in hours, minutes or a mixture of	



	evaluate with indices and roots.	Measure angles accurately using a protractor. Identify, draw and describe angle types, different triangles and different quadrilaterals. Understand and use the angle properties of triangles, straight lines, quadrilaterals and vertically opposite angles.		form $y = mx + c$ with and without a given table of values. Identify and interpret the gradient of a graph given in the form $y = mx$ + c. Sketch a graph using the gradient and intercept.	not imply causality. Use a line of best fit to make predictions, understanding the difference in reliability in interpolation and extrapolation.	Use a calculator correctly with time calculations.
Assess- ments	Assessment 4	Assessment 5	Assessment 6		Assessment 7	EOY Assessment



SUBJECT: MATHEMATICS: Foundation Pathway - Lower

Year Group	Year 8						
Rationale	Develop confidence with geometrical techniques to support problem solving. To use a scientific calculator more effectively. To increase confidence with the manipulation of proportional reasoning and number skills.						
Topic/Unit	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2	
Knowledge	 Working with Percentages Working with Indices, Powers & Roots 	 Theoretical Probability Lines, Shapes & Angles Perimeter & Area Revisit 	 Representin g & Solving Inequalities Ratio & Proportion 	 Fractions Revisit Drawing Linear Graphs 	 Relative Frequency & Listing Outcomes Scatter Graphs 	 2D & 3D Shapes Time 	
	Working with PercentagesConvert between simple fractions, decimals and percentages. Compare and order simple fractions, decimals and percentages. Express a number as a percentage of another number. Find a percentage of a quantity without a calculator: 50%, 25% and multiples of 10% and 5%. Find a percentage of a quantity with a calculator. Calculate the amount of percentage increase and decrease. Use percentages in simple real-life contexts including price after VAT.Working with Indices, Powers & Roots Recall the squares of 1 to 10 and cubes of 1, 2, 3, 4, 5 and 10. Recognise powers of 2, 3, 4, 5 and 10. Evaluate expressions involving squares, cubes and roots using	ProbabilityDistinguishevents asimpossible,unlikely, evens,likely andcertain.Mark events ona probabilityscale.Writeprobabilities inwords, fractions,decimals andpercentages.Find theprobability of anevent occurring.List outcomesfor singleevents.Work outprobabilitiesfrom frequencytables.Work outprobabilitiesfrom given two-way tables.Use knowledgeof mutuallyexclusive eventsto calculatemissingprobabilities orthe probability ofan event nothappening insimpleexamples.Lines, Shapes &AnglesUse correct 3 or2 letter notationfor lines, anglesand shapes.Identify andmark parallelandperpendicularlines.Describemeasures of	Representing& SolvingInequalitiesShowinequalities onnumber linesusing openand closedcircles.Write down allintegers thatsatisfy a giveninequality.Solve simplelinearinequalities inone variable,and representthe solution ona number line.Ratio &ProportionWrite a ratio todescribe asituation or torepresent adivision ofparts.Simplify ratiosincludingwriting ratios insimple unitaryform.Share aquantity in agiven ratioincluding 3part ratios.Interchangebetweenfractions andratios.Convertbetweenfractions andratios.Contexts.Manipulaterecipes in arange ofcontexts.Solveproportionproblems	Write fractions to describe shaded parts of a diagram and use diagrams to compare or order fractions. Simplify and find equivalent fractions including to compare or order fractions. Express one value as a fraction of another. Convert between mixed numbers and improper fractions. Add and subtract fractions including with mixed numbers. Multiply and divide fractions with fractions and with integers. Find a fraction of an amount. Drawing Linear Graphs Draw and identify graphs parallel to the axes as well as y = x and $y = -x$. Plot and draw graphs in the form $y = mx + c$ with and without a given table of values. Recognise that graphs of the form $y = mx + c$ correspond to straight lines.	KenauveFrequency &ListingOutcomesFind theprobability of anevent usingrelativefrequency.Estimate thenumber of timesan event willoccur given theprobability andthe number oftrials.List outcomessystematicallyfor combinedevents.Draw and usesimple samplespace diagrams.Scatter GraphsPlot or completea scatter graphon given axes.Identify outliersand considerwhat they show.Distinguishbetweenpositive,negative andzero correlation.Interpret ascatter graph interms of therelationship ofthe twovariables, usingcorrelation and areal-life context,in more simplecases.Draw a line ofbest fit by eye,in order tosupportcorrelation.Use a line ofbest fit to makepredictions,understanding	Draw circles and arcs to a given radius or diameter. Measure and draw line to the nearest mm. Know and use compass directions. Make accurate drawings of triangles using a ruler and protractor. Sketch and identify 3D shapes. Find the number of faces, edges and vertices on a 3D shape. Sketch and identify places of symmetry on simple 3D shapes. Draw plans, front elevations and side elevations of simple 3D shapes. Given the front elevations of simple 3D shapes. Given the front elevation, side elevation and plan be able to draw the 3D shape, in very simple cases. <u>Time</u> Use correct notation for 12 and 24-hour clock and convert between the two. Work out the time taken for a journey. Calculate time intervals in hours, minutes or a mixture of	



	arithmetic and index laws. Use index notation for powers of 10, including negative powers. Use the laws of indices to multiply and divide numbers written in index notation. Use BIDMAS correctly, including appreciating the use of negatives. Use a calculator correctly to evaluate with indices and roots.	angles, including clockwise and anti-clockwise. Estimate angle sizes. Measure angles accurately using a protractor. Identify, draw and describe angle types, different triangles and different quadrilaterals. Understand and use the angle properties of triangles, straight lines, quadrilaterals and vertically opposite angles. <u>Perimeter &</u> <u>Area Revisit</u> Find the perimeter of rectangles, triangles, parallelograms and trapezia. Find the perimeter of composite shapes made up from rectangles, triangles, parallelograms and trapezia. Find the area of rectangles and triangles using formulae. Find the area of composite shapes made from rectangles and triangles using formulae.	unitary method. Work out and justify which product offers the best value for money, in simple cases.	reliability in interpolation and extrapolation (using more simple language).	Use a calculator correctly with time calculations.
Assess- ments	Assessment 4	Assessment 5	Assessment 6	Assessment 7	EOY Assessment