

SUBJECT: MATHEMATICS – Higher Pathway - Upper

rear Group	Year 10						
Rationale	Communicate mainumeric and algebra and AO3 style que	thematical thinking r braic manipulation. L estions.	nore clearly within Jse a scientific ca	n more advanced area Iculator with ease. Be	as of study. Be flue come fluent worki	ent in the use of ng with AO1, AO2	
Topic/Unit	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2	
Knowledge	 Sketching & Using Quadratic Graphs & Quadratic Inequalities Scales & Bearings Iteration & Triple Brackets 	 Further Trigonometry & Pythagoras Solving Advanced Simultaneous Equations Accuracy & Bounds 	 Investigating Linear Graphs Algebraic Fractions & Equations 	 Numerical & Geometric Vectors Similarity in 3D 	Functions Circle Theorems	 Real Life Graphs & Measures Complex Solids & Measures Graphs of Trigonometric Functions & Transforming Graphs 	
SKIIIS	Sketching & Using Quadratic Graphs & Quadratic Inequalities Sketch a quadratic graph, finding key features from factorising and completing the square. Identify from a graph whether a quadratic has any real roots. Find approximate solutions to a quadratic equation using a graph. Solve quadratic inequalities including by factorising and sketch to find critical values. <u>Scales & Bearings</u> Interpret maps and scale drawings using a variety of scales and metric units. Construct scale drawings. Estimate real life measures. Draw and measure 3- figure bearings, including involving scale drawing. Calculate bearings using	FurtherTrigonometry & PythagorasCalculate the area of a triangle and solve problems using $\frac{1}{2} ab \sin c$ formula.Use the sine and cosine rules to calculate missing lengths and angles in non-right angled triangles.Calculate the length of a diagonal on a cuboid.Find the angle between a line and a plane.Use both Pythagoras' theorem and basic and advanced trigonometry to solve problems in 3D shapes.Solve geometrical problems on coordinate axes including 3D coordinates.Solving Advanced Simultaneous equations, one linear and one quadratic, using elimination	Investigating Linear Graphs Find the equation of a line through two given points. Work out graphs that are parallel or perpendicular to other graphs using a range of given information. Interpret and analyse parallel and perpendicular graphs in various contexts. <u>Algebraic Fractions &</u> <u>Equations</u> Simplify algebraic fractions. Add, subtract, multiply and divide algebraic fractions. Solve equations involving algebraic fractions. Change the subject of a formula/equati on where the variables are in the denominators of the algebraic fractions.	Numerical & Geometric Vectors Understand and use vector notation, including column notation. Understand the notation used with parallel vectors and the direction of a vector. Represent vectors, combinations of vectors and scalar multiples in the plane pictorially. Calculate the sum, difference or scalar multiple of a vector using column vectors and including algebraic terms. Represent vectors using algebra. Solve geometric problems in 2D, where vectors are divided in half or in a given ratio. Produce geometrical and algebraic proofs to show that vectors are parallel or that points are co- linear. <u>Similarity in 3D</u> Understand the effect of enlargement on angles, lengths, area and volume. Write the lengths, areas or volumes of shapes as a	FunctionsUse functionnotation.Evaluatenumericalfunctions, e.g.f(2)Add, subtractand findmultiples offunctions,numericallyandalgebraically.Find theinverse of afunction anduse correctnotation torepresent aninversefunctions.nindcompositefunctionsnumericallyandalgebraically.CircleTheoremsRecall theparts of acircle.Prove and usethe followingcircle is twicethe anglesubtended byan arc at thecentre of acircle is twicethe anglesubtended atany point onthecircumference;	Keal LifeGraphs &MeasuresDraw and usestraight linegraphs for real-life situationsincludingconversiongraphs.Interpret thegradient andintercept in arange of real-lifecontexts on alinear or non-linear graph.Interpret the rateof change ofgraphs ofcontainers fillingand emptying.Draw distance-time graphs tocalculate andinterpret a rangeof measures:speed, distance,time (includingestimates fromnon-lineargraphs).Understand anduse thecompoundmeasures ofspeed, distanceand time.Convertbetween metricspeeduse velocity-time graphs.Use velocity-time graphs.	



and	and/or	ratio in its simplest	the angle is a	interpret a range
trigonometry	substitution.	form.	semi-circle is a	of measures:
where required.	Solve a pair of	Calculate the	right angle;	acceleration,
	simultaneous	linear, area or	the "	average
Iteration & Triple	equations, one	volume scale	perpendicular	acceleration,
Brackets	linear and one of	factor from given	from the	distance
expand and	a circle, using	ZD OF 3D shapes.	centre or a	including
simplify the	enmination end/or	Know the	circle to a	including
brackets	substitution	hetween the	the chord.	non-linear
Show that the	Solve pairs of	linear area and	angles in the	aranhe
solution to a	linear/quadratic	volume scale	same segment	graphs.
higher power	or linear/circular	factors and use	are equal:	Complex Solids
equation lies	graphically.	one to calculate	opposite	& Measures
between two	including where	another. Find	angles in a	Solve problems
given values.	graphs are given	missing lengths,	cyclic	involving more
Rearrange a	or need to be	areas or volume	quadrilateral	complex solids
higher power	drawn.	from similar 2D	sum to 180°;	including
equation in	Accuracy &	and 3D shapes in	the alternate	segments of
either a 'show	Bounds	a range of	segment	circles and
that' form or	Calculate the	contexts.	theorem.	frustums.
other, to begin	upper and		Use the fact	Solve problems
the process of	lowers bounds		that the	involving
Iteration.	of numbers and		tangent at any	trustums where
Use iteration to	measurements		point on a	missing lengths
and approximate	dogroop of		circie is	of cimilor
complex			to the radius at	triangles
equations	Calculate upper		that point and	Find the surface
Consider and	and lower		that tangents	area and volume
comment on the	bounds of		from an	of compound
accuracy of a	calculations		external point	solids
solution found	using all four		are equal in	constructed from
through	operations,		length.	cubes, cuboids,
iteration.	powers and		Use the fact	cones,
	roots, with		that the angle	pyramids,
	various metric		between the	sphere,
	units and in		tangent and	hemispheres
	various		radius is 90°.	and cylinders.
	contexts.		Solve a range	
			of missing	Convert
	Use inequality		angles	between metric
	notation to write		problems	measurements
	an error interval.		using circle	of volume and
	GIVE		theorems,	capacity.
	calculations		angle	Understand and
	to on		properties and	
	annronriate		properties of	measures of
	degree of		shanes	mass density
	accuracy		Shapes.	and volume
	justifying the			Convert
	choice.			between metric
				density
				measurements.
				Understand and
				use the
				compound
				measures of
				force, pressure
				and area.
				Convert
				between metric
				pressure
				measures.
				Graphs of
				<u>i rigonometric</u>
				<u>runctions &</u> Transforming
				Graphs
				Becognico
				sketch and
				sitution and



					interpret graphs of trigonometric functions (in degrees) $y =$ $\sin x, y =$ $\cos x$ and $y =$ $\tan x$ for angles of any size. Apply to the graph of $y =$ f(x) (including sketching or representing algebraically) the transformations of reflection ($y =$ -f(x) and $y =f(x)$ and $y =f(x) + a$ and y = f(x + a)) including for
					algebraically) the transformations of reflection ($y =$ -f(x) and $y =f(-x)$) and translation ($y =$ f(x) + a and y = f(x + a)) including for linear, quadratic, cubic, reciprocal and
					trigonometrical functions.
Assess- ments	Assessment 12	Assessment 13	Assessment 14	Assessment 15	EOY Assessment



SUBJECT: MATHEMATICS – Higher Pathway - Lower

real Group	Year 10						
Rationale	Communicate mat numeric and algeb and AO3 style que	hematical thinking r praic manipulation. L estions.	nore clearly within Jse a scientific cal	more advanced are culator with ease. B	eas of study. Be mo secome fluent worki	re confident with ng with AO1, AO2	
Topics/Skills	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2	
Knowledge	 Sketching Circle Graphs, Using Quadratic Graphs & Inequalities Scales & Bearings Iteration & Triple Brackets 	 Further Trigonometry & Pythagoras Solving Advanced Simultaneous Equations Graphically Accuracy & Bounds 	 Investigating Linear Graphs Algebraic Fractions & Equations 	 Numerical & Geometric Vectors Similarity in 3D 	 Functions Circle Theorems 	 Real Life Graphs & Measures Complex Solids & Measures Graphs of Trigonometric Functions & Transforming Graphs 	
Skills	Sketching & Using Quadratic Graphs & Quadratic Inequalities Sketch a quadratic graph, finding roots from factorising or using the quadratic formula. Identify from a graph whether a quadratic has any real roots. Find approximate solutions to a quadratic equation using a graph. Estimate the gradient at a point, on a quadratic graph. Draw circles with a centre at the origin, in the form $x^2 + y^2 = r^2$ Solve quadratic inequalities including by factorising and sketch to find critical values. Scales & Bearings Interpret maps and scale drawings using a variety of scales and metric units. Construct scale drawings. Estimate real life	Further Trigonometry & Pythagoras Calculate the area of a triangle and solve problems using $\frac{1}{2}ab\sin c$ formula. Use the sine and cosine rules to calculate missing lengths and angles in non-right angled triangles. Calculate the length of a diagonal on a cuboid. Find the angle between a line and a plane. Use both Pythagoras' theorem and basic trigonometry to solve simple problems in 3D shapes. Solving Advanced Simultaneous Equations Solve a pair of simultaneous equations graphically only, including: one linear and one of a circle, including where graphs are given	Investigating Linear Graphs Plot and draw graphs of the form ax + by = c. Identify and interpret gradient and intercept from graphs of the form ax + by = c. Find the equation of a line through one point with a given gradient. Find the equation of a line through two given points. Know and use the fact that parallel graphs have the same gradient and perpendicular graphs have gradients with a product of - 1. Work out graphs that are parallel or perpendicular to other graphs using a range of given information. Interpret and analyse parallel and perpendicular graphs in various	Numerical & Geometric Vectors Understand and use vector notation, including column notation. Understand the notation used with parallel vectors and the direction of a vector. Represent vectors, combinations of vectors and scalar multiples in the plane pictorially. Calculate the sum, difference or scalar multiple of a vector using column vectors and including algebraic terms. Represent vectors using column vectors and including algebra. Solve geometric problems in 2D, where vectors are divided in half or in a given ratio. Produce geometrical and algebraic proofs to show that vectors are parallel or that points are co- linear, in simple cases. Similarity in 3D	<u>Functions</u> Use function notation. Evaluate numerical functions, e.g. f(2) Add, subtract and find multiples of functions, numerically and algebraically. Find the inverse of a function and use correct notation to represent an inverse function. Find composite functions numerically and algebraically with very simple examples. <u>Circle Theorems</u> Recall the parts of a circle. Know and use (but not prove) the following circle theorems: the angle subtended by an arc at the centre of a circle is twice the angle subtended at any point on the circumference; the angle; the perpendicular from the centre of a circle to a	Real Life Graphs & Measures Draw and use straight-line graphs for real- life situations including conversion graphs. Interpret the gradient and intercept in a range of real-life contexts on a linear or non- linear graph. Interpret the rate of change of graphs of containers filling and emptying. Draw distance- time graphs. Use distance- time graphs to calculate and interpret a range of measures: speed, average speed, distance, time (including estimates from non-linear graphs). Understand and use the compound measures of speed, distance and time. Convert between metric speed measurements. Draw velocity- time graphs.	



Draw and	or need to be	Algebraic	Understand the	chord bisects	calculate and
measure 3-	drawn	Fractions &	effect of	the chord.	interpret a range
figuro booringo	arawn.	Equations	onlargement on	angles in the	of moneuroe:
including		<u>Equations</u>			or measures.
including	Accuracy &	Simpliny	angles, lengths,	same segment	acceleration,
involving scale	Bounds	algebraic	area and	are equal;	average
drawing.	Calculate the	fractions.	volume.	opposite angles	acceleration,
Calculate	upper and	Add, subtract,	Write the	in a cyclic	distance
bearings using	lowers bounds	multiply and	lengths, areas or	quadrilateral	travelled
angle properties	of numbers and	divide	volumes of	sum to 180°;	including
and	measurements	algebraic	shapes as a	the alternate	estimations from
trigonometry	given to various	fractions.	ratio in its	segment	non-linear
where required.	degrees of	Solve	simplest form.	theorem;	graphs.
•	accuracy.	equations	Calculate the	the tangent at	0
Iteration & Triple	Calculate upper	involving	linear, area or	any point on a	Complex Solids
Brackets	and lower	algebraic	volume scale	circle is	& Measures
Expand and	hounds of	fractions	factor from given	perpendicular to	Solve problems
simplify the	calculations	naotiono.	2D or 3D	the radius at that	involving more
product of three	using all four		shanes	noint.	complex solids
brocketo	using an iour		Shapes.	point, tongonto from	including
Diackets.	operations,			langents nom	
Show that the	powers and		relationship	an external point	segments of
solution to a	roots and with		between the	are equal in	circles and
higher power	various		linear, area and	length;	frustums.
equation lies	metric units and		volume scale	the angle	Solve problems
between two	in various		factors and use	between the	involving
given values.	contexts.		one to calculate	tangent and	frustums where
Rearrange a	Use inequality		another.	radius is 90°.	missing lengths
simple higher	notation to write		Find missing	Solve a range of	require the use
power equation	an error interval.		lengths, areas or	missing angles	of similar
in either a 'show	Give		volume from	problems using	triangles.
that' form or	calculations		similar 2D and	circle theorems.	Find the surface
other to begin	involving bounds		3D shapes in a	angle properties	area and volume
the process of	to an		range of	and geometrical	of compound
iteration	annronriate		contexts	properties of	solide
	degree of		COMERIO.	chapos	constructed from
				shapes.	
Given x ₀ , Use	accuracy,				
iteration to find	Justifying the				cones,
approximate	choice.				pyramids,
solutions to					sphere,
different					hemispheres
equations.					and cylinders.
Consider and					
comment on the					Convert
accuracy of a					between metric
solution found					measurements
through					of volume and
iteration					capacity
noration					Understand and
					monourroa
					measures of
					mass, density
					and volume.
					Convert
					between metric
					density
					measurements.
					Understand and
					use the
					compound
					measures of
					force pressure
					and area
					Convert
					botwoon motric
					Detween metric
					pressure
					measures.
					Graphs of
					<u>Trigonometric</u>
					Functions &
					Transforming
					Graphs



Assess-	Assessment 12	Assessment 13	Assessment	Assessment 15	Recognise, sketch and interpret graphs of trigonometric functions (in degrees) $y =$ sin $x, y =$ cos x and $y =$ tan x for angles of any size. Apply to the graph of $y =$ f(x) (including sketching or representing algebraically) the transformations of reflection ($y =$ -f(x) and $y =f(-x)$) and translation ($y =$ f(x) + a and y = f(x + a)) including for linear, quadratic, cubic, reciprocal and trigonometrical functions. EOY
ments			14		Assessment



SUBJECT: MATHEMATICS – Foundation Pathway - Upper

Year Group	Year 10							
Rationale	Communicate m	athematical thinking	more clearly within	more advanced are	eas of study. Be mo	re confident with		
	numeric and alge	ebraic manipulation,	as well as proportion	onal reasoning. Use	a scientific calculat	or with ease.		
T	Become more co	onfident working wit	h AO1, AO2 and AC	03 style questions.				
I opic/Unit	Autumn Term	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term	Summer Term		
Knowledge	Ratio &	Changing the	Transformatio	Working with	Proportion	 Quadratic 		
· ····································	Fractions	Subject of a	ns	Circles in 2D	 Relative 	Expressions,		
	 Applications 	Formula	 Simultaneous 	& 3D	Frequency &	Equations &		
	of Scatter	 Working with 	Equations	 Multiplicative 	Tree	Graphs		
	Graphs	Linear Graphs		Reasoning	Diagrams	 Scales, Scale Drowing 8 		
	v	Graphs				Bearings		
	y	 Similarity in 				Doamigo		
		2D Shapes						
Skills	Ratio &	Changing the	Transformations	Working with	Proportion	Quadratic		
	Fractions	Subject of a	Recognise,	Circles in 2D &	Understand the	Expressions,		
	Write and	<u>Formula</u>	describe and	<u>3D</u>	difference	Equations &		
	simplify ratios	Rearrange	draw rotations	Calculate arc	between direct	<u>Graphs</u>		
	information	simple equations and	using a centre of	and the area of	and inverse	Factorise		
	Share values	formula.	and direction.	sectors of a	Recognise direct	expressions of		
	in a given ratio	Change the	Recognise,	circle.	and inverse	the form $x^2 + bx$		
	in a range of	subject of an	describe and	Find the surface	proportion from	+ C.		
	contexts.	equation or	draw reflections	area of a	graphs and use	Factorise		
	Given the	formula	using a mirror	cylinder.	graphs to	quadratic		
	part of a ratio	of squares	equation	of a cylinder	Find missing	the form $x^2 - a^2$		
	find the other	cubes, square	Recognise,	Find the surface	values in tables	using the		
	or the total	roots and cube	describe and	area and volume	of data that are	difference of two		
	amount.	roots.	draw	of spheres,	in direct or	squares		
	Apply the four	Change the	translations	cones, pyramids	inverse	technique.		
	rules of arithmetic to	subject of an	using a column	and composite	proportion.	Solve simple		
	fractions in	formula where	Recognise.	301103.	inverse	equations by		
	order to solve	the subject	describe and	Multiplicative	proportion	factorising.		
	a range of	appears more	draw	Reasoning	problems in a	Find the roots of		
	problems.	than once, in	enlargements	Express a given	range of	a quadratic		
	Find fractions	simple cases	using a centre of	number as a	contexts.	function		
	order to solve	factorising	(and without)	another number	Relative	Generate points		
	problems.	required.	and a scale	in more complex	Frequency &	and plot		
		•	factor, including	situations	Tree Diagrams	quadratic		
	Applications of	Working with	fractional	including	Find the	functions.		
	<u>Scatter</u>	Linear Graphs	values.	problem solving.	probability of an	Identify the		
	Graphs Plot and	co-ordinates in	Describe the		event nappening	turning point,		
	interpret	all 4 quadrants.	combined	profit and loss.	frequency.	symmetry from a		
	scatter graphs	Find the co-	transformations	Make	Estimate the	quadratic graph.		
	in a range of	ordinates of the	as a single	calculations	number of times	Find		
	contexts.	midpoint of a	transformation.	involving	an event will	approximate		
	Identify	line segment,	Simultanagua	repeated	nappen from	solutions to a		
	consider what	a given diagram	Equations	change	information and	equation using		
	they show.	Draw, label and	Solve a pair of	including the	relative	its graph.		
	Identify	accurately scale	linear	use of a formula.	frequency.	Generate points		
	correlation and	axes.	simultaneous	Find the original	Compare	and plot cubic		
	interpret in the	Plot and draw	equations using	amount given	relative	and reciprocal		
		the form $ax \perp by$	including	after a	different sample	Scales Scale		
	Draw and use	= C.	working with	percentage	sizes.	Drawing &		
	a line of best	Find the	fractional and	increase or	Find the	Bearings		
	fit to make	equation of a	negatives	decrease.	probability of	Interpret maps		
	predictions for	straight line from	solutions.	Calculate	successive	and scale		
	unknown data.	its graph.	Identity the	compound	events, such as	drawings.		
	reliability of	equation of the	solutions of	depreciation	of a dice	Esumate lengths		
	predictions	straight line		including the		diagram or		



based on whether they	through one point and a	equations drawn graphically.	amount of interest or the	Complete tree diagrams from	knowledge of real-life lengths.
come from interpolation or	given gradient. Find the	Set up simultaneous	final amount.	given information.	Make an accurate scale
extrapolation.	equation of the	equations to		Use tree diagrams to	drawing from a
Know and use	through two	situation and		calculate the	Draw and
the	given points.	solve within the		probability of	measure three-
trigonometric ratios sine.	Find approximate	problem.		two independent events and of	figure bearings. Mark on a
cosine and	solutions to			two dependent	diagram the
tangent and	linear equations			events.	position of point B given its
find unknown	Real Life				bearing from
sides and	<u>Graphs</u> Drow and				point A and vice
angled	interpret straight				Use bearings
triangles.	line graphs for				with scale
Find angles of elevation and	real-life situations				diagrams.
depression.	including				
Solve	conversion				
using the trig.	Find and				
ratios,	interpret the				
Pythagoras'	real-life graph, in				
theorem and	the context of				
angle properties.	the question. Draw distance-				
Know the	time graphs.				
exact values of $\sin \theta \cos \theta$	Interpret distance-time				
and tan θ for	graphs and				
0°, 30°, 45° and 60° and	calculate the				
90° for sin θ	individual				
and $\cos \theta$	sections, total				
oniy.	total time.				
	Draw velocity-				
	time graphs. Interpret				
	gradient as the				
	rate of change in distance-time				
	and speed-time				
	graphs, graphs				
	emptying and				
	unit price graphs				
	Similarity in 2D				
	<u>Shapes</u> Write the				
	lengths of two				
	shapes as a				
	simplest form.				
	Understand the				
	make shapes				
	similar, for both				
	lengths and angles.				
	Prove that two				
	shapes are				
	angle properties				
	and/or enlargement				
	e.nargement.		1		



		Identify the scale factor that links similar shapes and use it to find missing lengths in a range of situations (including the use of fractional scale factors)			
Assess- ments	Assessment 12	Assessment 13	Assessment 14	Assessment 15	EOY Assessment



SUBJECT: MATHEMATICS – Foundation Pathway - Lower

· · · ·	YEAR 10							
Rationale Co wo mo	communicate ma orking with num ore familiar with	athematical thinking bber calculations an h the differences be	more clearly within d proportional rease tween AO1, AO2 ar	more advanced are oning. Use a scienti nd AO3 style question	eas of study. Be mo fic calculator effectiv ons.	re confident /ely. Become		
Topic/Unit A	utumn Term	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2		
Knowledge	Ratio & Fractions revisit Scatter Graphs revisit Linking Fractions & Decimals Changing the Subject of a Formula	 Working with Linear Graphs Solving Linear Equations revisit Real Life Graphs Similarity & Congruency in 2D Shapes 	 Transform- ations Working with Inequalities 	 Real Life Measurement s Working with Shapes in 2D & 3D 	 Percentage Calculations Ratio & Proportion revisit 	 Relative Frequency & Tree Diagrams Quadratic Equations, Expressions & Graphs Scales, Scale Drawing & Bearings 		
Skills Rate Skills Fr. Skills Fr. W sir Sir fr. in in in in in in in in or an Ap rul aria fr. or pr. SciGi Pi. int sci out co out co int sci out co out co	atio & ractions ractions avisit //rite and implify ratios om given iformation. hare values a given ratio a range of ontexts. Siven the alue of one art of a ratio nd the other r the total mount. pply the four ules of rithmetic to actions in rder to solve roblems. ind fractions f amounts in rder to solve roblems. ind fractions f amounts in rder to solve roblems. catter craphs revisit lot and iterpret catter graphs a range of ontexts. dentify utilers and onsider what hey show. dentify orrelation and iterpret in the ontext of the roblem. raw and use line of best t to make redictions for	Working with Linear Graphs Identify and plot co-ordinates in all 4 quadrants. Find the co- ordinates of the midpoint of a line segment, with and without a given diagram. Draw, label and accurately scale axes. Draw and identify graphs that are parallel to the axes, as well as $y = x$ and y = -x. Plot and draw linear graphs of the form $y = mx$ + c using a given table of values or constructing one. Find and interpret the gradient of a line from its equation or its graph, in simple cases. Find and interpret the intercept of a line from its equation or its graph, in simple cases. Identify parallel lines from their equations. Find the equation of a straight line from its graph in very	Transformations Recognise, describe and draw rotations using a centre of rotation, angle and direction. Recognise, describe and draw reflections using a mirror line and its equation. Recognise, describe and draw translations using a column vector. Recognise, describe and draw enlargements using a centre of enlargement (and without) and a scale factor, including fractional values. Describe the effect of combined transformations as a single transformation, in simple cases. <u>Working with</u> Inequalities Show inequalities on number lines using open and closed circles. Write down all integers that satisfy a given	Real LifeMeasurementsUse correctnotation for 12and 24-hourclock andconvert betweenthe two.Work out thetime taken for ajourney.Calculate timeintervals inhours, minutesor a mixture ofboth.Use a calculatorcorrectly withtimecalculations.Read from anduse timetables.Read from anduse mileagecharts.Choose anappropriate unitof measurementfor a range ofsituationsincludingestimations.Convertbetween metricmeasurements.Working withShapes in 2D &3DFind theperimeter ofrectangles,parallelogramsand trapezia,includingcompositeshapes.	Percentage Calculations Convert between fractions, decimals and percentages. Compare and order fractions, decimals and percentages. Express a given number as a percentage of another number. Find percentages of amounts with and without a calculator. Calculate the amount of a percentage increase or decrease. Use percentages to solve problems and in real-life contexts such as VAT, value of profit and loss and simple interest. Calculate percentage profit and loss in simple cases. Ratio & Proportion revisit Simplify ratios including writing ratios in simple unitary form. Share a quantity in a given ratio	RelativeFrequency &Free DiagramsFind theprobability of anevent happeningusing relativefrequency.Estimate thenumber of timesan event willhappen fromgiveninformation andrelativefrequency.Comparerelativefrequencies fromdifferent samplesizes.Find theprobability ofsuccessiveevents, such asseveral throwsof a dice.Complete treediagrams fromgiveninformation.Use treediagrams tocalculate theprobability oftwo events.QuadraticExpressions,Equations &GraphsSimplifyexpressionsinvolving singlebracketsincludingexpanding andsimplifying more		



Assess the	Find	Solve linear	Find the area of	including 3 part	than one single
reliability of	approximate	inequalities in	rectangles.	ratios.	bracket.
predictions	solutions to	one variable and	triangles.	Interchange	Fully factorise
based.	linear equations	represent the	parallelograms	between	an expression
Linking	from graphs	solution on a	and trapezia	fractions and	into a single
Fractions &	Solving Linear	number line	including	ratios	bracket
Decimals	Equations revisit	Use inequality	composite	Convert	Expand and
Convert	Write simple	notation to	shanes	between	simplify simple
between	expressions or	express error	Find the surface	currencies in a	double brackets
fractions and	equations from	intervals for	area of basic 3D	range of	Factorise
decimals	aiven	rounding and	shanes	contexts	quadratic
Recognise	information	nossibly	Find the volume	Maninulate	evoressions of
recurring	Solve linear	truncation	of basic 3D	recines in a	the form $x^2 + bx$
decimals and	equations with	trancation.	or basic ob	range of	
converts	integer		a cylinder	contexts	coefficients are
fractions into	coefficients		a cymuer.	Solve proportion	positive
recurring	where the			problems using	Generate points
decimals	unknown			the unitary	and plot
Compare and	annears on			method	quadratic
order fractions	appears on			Work out and	functions using
decimals and	extending to			iustify which	a table of
integers	both sides in			product offers	
including using	simple cases			the best value	Find
inequality	Solve equations			for money in	annrovimate
signs	involving			simple cases	solutions to a
Changing the	brackets			Lise a ratio to	auadratic
Subject of a	Solve linear				equation using
<u>Subject of a</u> Formula	equation			model to a real	ite graph
Rearrange	including those			life object	Identify the
simple	with pegative			me object.	turning noint
simple	solutions				roots and line of
formula	Pearrange				symmetry from a
Change the	simple				auadratic graph
subject of an	equations				Quadratic graph.
	equations.				Drawing 8
formula					Bearings
involving the	Pool Life				Interpret maps
	<u>Cranha</u>				interpret maps
	<u>Graphs</u> Drow and				drowingo
squares,	interpret streight				Grawings.
cubes, square	line graphs for				
rooto	rool life				diogram or
10015.	cituationa				ulayiani ul
	including				rool life lengths
	achuaraian				real-life lenguis.
	arapha				Maka an
	graphs. Draw dictanco				
	timo granhe				drawing from a
	Interpret simple				diagram
	distance time				ulayiani. Draw and
	aropho				Diaw aliu
	graphs. Drowwork				figure beeringe
	cimple velocity				in cimple
	simple velocity-				in simple
	Cimilarity 8				ulagrams. Mark an a
	<u>Similarity &</u>				Mark on a
	Congruency In				diagram the
	<u>ZD</u> Change				position of point
	Snapes				B given its
	Recognise and				bearing from
	name different				point A.
	polygons.				Use bearings
	Identify shapes				with scale
	which are				diagrams.
	similar,				
	understanding				
	the conditions				
	that make				
	snapes similar,				
	tor both lengths				
	and angles.				
	Identify the				
	scale factor that				



		links similar shapes. Solve problems to find missing length for simple scale factors such as 2, 3 or 0.5. Identify shapes which are congruent, by eye.			
Assess- ments	Assessment 12	Assessment 13	Assessment 14	Assessment 15	EOY Assessment