Careers

Autumn Term Easter Term Summer Term

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	11.21	De all'an annual a		M1			M2			M3		N	4
	Unit	Basiline assessments		Prime Factors HCF/LCM			Decimals and Rounding	Fractions: Adding & Subtracting				Fractions: Multi	olying & Dividing
Year 7	Skills		Finding the lowest common multiple(M227) Finding factors and using divisibility tests(M823) Finding the highest common factor(M698)	Finding prime numbers(M322) Prime factor decomposition(M108)	Finding the HCF and LCM using prime factor decomposition(M365)	Multiplying and dividing by 10, 100 and 1000(M113) Multiplying using place value(M911) Using a written method to multiply integers(M187) Using a written method to multiply decimals(M803)Adding integers(M928) Adding decimals(M429) Subtracting integers(M347) Subtracting decimals(M152)	Dividing numbers into equal groups(M462) Using a written method to divide integers(M354) Dividing with a remainder(M873) Using a written method to divide by integers to get a decimal answer(M262) Using a written method to divide by decimals(M491)	Rounding integers using significant figures(M994) Rounding decimals using significant figures(M131) Estimating calculations(M878)	Finding fractions of shapes(M158) Constructing fractions(M939) Finding equivalent fractions(M410)	Converting between mixed numbers and improper fractions(M601) Simplifying fractions(M671) Ordering fractions(M335)	Adding and subtracting fractions(M335) Adding and subtracting mixed numbers(M931)	Reciprocals(M216) Multiplying fractions(M157) Dividing fractions(M110)	Multiplying with mixed numbers(M197) Dividing with mixed numbers(M265)
	11.2	M5		M6		M7		M8	M9		M10		
	Unit	Numbe	er Sense	2D Shapes	2D Shapes		Perimeter & Area		Expressions & Equations		Measures		
Year 7	Skills	Adding and subtracting with negative numbers(M106) Multiplying and dividing with negative numbers(M288) Ordering negative numbers(M527)	Calculating with roots and powers(M135) Using the correct order of operations(M521) Using the commutative laws(M952) Using the associative laws(M409)	Line properties(M814) Shape properties(M276) Symmetry(M523)	Finding perimeters using grids(M920) Finding the perimeter of rectangles and simple shapes(M635) Finding the perimeter of compound shapes(M690)	Finding areas using grids(M900) Finding the area of rectangles(M390) Finding the area of compound shapes(M269)	Finding the area of triangles(M610) Finding the area of compound shapes containing triangles(M996)	Reading and plotting coordinates(M618) Solving shape problems involving coordinates(M230)	Algebraic notation(M813) Algebraic terminology(M830) Simplifying expressions containing a single variable(M795) Simplifying expressions containing multiple variable(M531) Simplifying expressions containing non-linear terms(M949)	Substituting into expressions with one operation(M417) Substituting into expressions with multiple operations(M327) Substituting into algebraic formulae(M208) Substituting into real-life formulae(M979)	Solving equations with one step(M707) Solving equations of the form ax+b=c ax+b=c(M634) Solving equations of the form x/a+b=c x/a+b=c(M647)	Converting units of time(M515) Using clocks(M892) Calculating with time(M627) Using timetables(M963) Using calendars(M747)	Estimating and measuring length, mass and capacity(M828) Converting units of length, mass and capacity(M774) Using appropriate units(M487)
		M11	N	112		M13	*	M14		M15		M	16
	Unit	Brackets	Ar	igles	Handl	ing Data and Statistical dia	grams S	Proportion	Frac	tions, Decimals and Percent	tages	Proba	bility
Year 7	Skills	Using the distributive law(M637) Expanding single brackets(M237) Expanding single brackets and simplifying expressions(M792) Factorising into one bracket(M100)	Types of angles(M502) Estimating angles(M541) Measuring angles(M780) Drawing angles(M331)	Angles on a line and about a point(M818) Vertically opposite angles(M163) Angles in triangles(M351)	Calculating the range(M328) Calculating the median(M934) Finding the mode(M841) Calculating the mean(M940)	Interpreting frequency tables and two-way tables[M899] Drawing and interpreting tally charts[M597] Drawing and interpreting pictograms[M644] Drawing bar charts[M460] Interpreting bar charts[M738]	Collecting and recording data using tables(M945) Finding averages from frequency tables(M127) Choosing suitable averages and solving problems(M440)	Solving proportion problems(M478)	Fractions of amounts without a calculator(M695) Fractions of amounts with a calculator(M684)	Converting between fract Converting between f percentag Ordering fractions, decima Writing numbers as number	tions and decimals(M958) ractions, decimals and ges(M264) als and percentages(M553) percentages of other s(M235)	Using probabiliti Writing probabilitie Writing probabilities as percenta Probabilities of mutually Sample space o	y phrases(M655) as fractions(M941) fractions, decimals and es(M938) exclusive events(M755) iagrams(M718)

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Unit	M1			M2				M3			M4	, t
	onic	Understanding & Using Formulae			Equations			Number Patterns & Sequences			Probability		
Year 8	Skills	Order of operations (BIDMAS) Recap of negative number rules	Substituting into expressions with one operation(M417) Substituting into expressions with multiple operations(M327) Substituting into algebraic formulae(M208) Substituting into real-life formulae(M979)	Changing the subjects of formulae with one step(U675) Changing the subjects of formulae with two or more steps(U181)	Solving equations of the form (x+a)/b=c (x+a)/b=c(M401) Solving linear equations involving brackets(M902) Solving equations with the unknown in the denominator (M387)	Solving equations with the unknown on both sides (M554) including with brackets Constructing and solving equations(M957)	Problem solving with equations	Term-to-term rules for numerical sequences(M381) Term-to-term rules for sequences of patterns(M241)	Substituting into position- to-term rules(M166) Position-to-term rules for arithmetic sequences(M991) Position-to-term rules for sequences of patterns(M866)	Problems involving sequences	Us Writin Writing probabilitie Probabiliti Sample space diagrams(M frequency	ng probability phrases(M653 g probabilities as fractions(N as fractions, decimals and p es of mutually exclusive even 718) for independent events	5) /1941) percentages(M938) tts(M755) Relative Tree diagrams
		M5	M6	M7	M7/8	M8	M9	M	10	M11		M12	* -
	Unit	Rounding	Coordinates	Area	Area/Circles	Circles	Standard Form	Venn Di	iagrams	3D Shapes		Surface Area and Volume	<u>```</u> ^`
Year 8	Skills	Rounding integers using significant figures(M994) Rounding decimals using significant figures(M131) Estimating calculations(M878)	Calculating midpoints(M622) Mixed problems: Coordinates and midpoints(M311)	Finding the area of parallelograms(M291) Finding the area of trapeziums(M705)	Converting units of area(M728) Identifying parts of circles(M595)	Finding the circumference of circles(M169) Finding the area of circles(M231)	Using standard form with positive indices(M719) Using standard form with negative indices(M678)	Venn diagra Probabilities from Ve	ams(M829) enn diagrams(M419)	Properties of 3D shapes(M767) Nets of 3D shapes(M518)	Finding the surface area from a net(M884) Finding the surface area of cubes and cuboids(M534) Finding the surface area of prisms(M661)	Finding the volume of cut Finding the volume Converting units o	bes and cuboids(M765) e of prisms(M722) f volume(M465)
	Unit	M13	M14	M1	15		M16		M17	M18	M19 M20		M20

		Linear Graphs	Transformations	Angles	Statistical diagrams	Inequalities	Brackets	Algebraic Fractions		Recurring Decimals
Year 8	Skills	Plotting horizontal, vertical and diagonal lines(M797) Plotting straight line graphs(M932) Finding equations of straight line graphs(M544)	Translation(M139) Reflection(M290)	Angles in quadrilaterals(M679) Combining angle facts(M319) Angles on parallel lines(M606) Using quadrilateral properties to find angles(M393) Angles in polygons(M653)	Drawing pie charts(M574) Interpreting pie charts(M165) Drawing line graphs(M140) Interpreting line graphs(M183) Drawing stem-and-leaf diagrams(M648) Interpreting stem-and-leaf diagrams(M210) Finding averages from diagrams(U854)	Reading and drawing linear inequalities on number lines(M384) Solving single inequalities(M118)	Expanding double brackets(M960)	Calculating with fractions(M645) Calculating with mixed numbers(M619)	Simplifying algebraic fractions by factorising(M754) Adding and subtracting algebraic fractions(M336)	Using recurring decimal notation(M701) Converting fractions to recurring decimals(M922)

		Week 1	Week 2	Week 3	Week 4 Week 5 Week 6			Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	11=14		M1		M2			M3				M4	<u>.</u>
	Unit		Rules of Indices			Surds		Rearrangi	ing Formula and Pythagoras	' Theorem		Right angled Trigonometry	<u>~</u> V-
Year 9	Skills	Index rules with positive indices(M608) Index rules with negative indices(M150) Simplifying expressions using index laws(M120) Simplifying algebraic fractions by cancelling common factors(M568)	Estimating roots and powers(U299) Indices of the form 1/a(U985) Indices of the form a/b(U772)	Converting to and from standard form Multiplying and dividing numbers in standard form(U264) Adding and subtracting numbers in standard form(U290) Standard form with a calculator(U161)	Multiplying and dividing surds(U633) Simplifying surds(U338)	Adding and subtracting surds(U872) Expanding brackets with surds(U499)	Using a calcualtor efficiently	ualtor ly Valtor Iv Valtor Val		Understanding sin, cos and tan(U605) Finding unknown sides in right-angled triangles(U283) Finding unknown angles in right-angled triangles(U545)		1605) angles(U283) iangles(U545)	
		M5	M6	M7	ма 🌾	N	М9		M10		M11		12
Year 9	Unit	Fraction and Percentage Change	Circles	3D Shapes	Quadratic expressions	Ratio and	Proportion	Linear Graphs		Compound Measures		Motion-time graphs	
	Skills	Finding fractions of amounts without a calculator(U881) Finding fractions of amounts with a calculator(U916) Finding percentages of amounts without a calculator(U554) Finding percentages of amounts with a calculator(U349)	Finding the arc length of sectors(U221) Finding the area of sectors(U373) Finding the surface area of cylinders(U464) Finding the volume of cylinders(U915)	Plans and elevations(U743)	Factorising quadratic equations of the form x2+bx+c (U178) Factorising the difference of two squares(U963) Factorising to solve quadratic equations of the form x2+bx+c=0 (U228)	Writing and simplifying ratios(U687) Sharing amounts in a given ratio(U577)	Solving direct proportion word problems(U721) Solving inverse proportion word problems(U357) Currency conversion(U610)	Plotting straight Finding equations of str Interpreting equations of	line graphs(U741) raight line graphs(U315) straight line graphs(U669)	Calculating wit Calculating wi	h speed(U151) th rates(U256)	Plotting distance-t Interpreting distance Calculating speed from dis Plotting distance-time gr	ime graphs(U403) e-time graphs(U914) stance-time graphs(U462) aphs using speeds(U966)
	Unit	M13	N	114	M15	М	16			M17			M18
	onit	Quadratic Graphs	Angles ar	nd Bearings	Transformations	Similarity and	d Congruence		Handl	ing Data and Statistical Dia	grams		Vectors
Year 9	Skills	Plotting graphs of quadratic functions(U989) Interpreting graphs of quadratic functions(U667) Solving quadratic equations graphically(U601)	Combining angle facts(U655) Angles on parallel lines(U826) Using quadrilateral properties to find angles(U329) Angles in polygons(U427)	Measuring and drawing bearings(U525) Calculating bearings(U107)	Translation(U196) Reflection(U799) Rotation(U696) Enlargement by a positive scale factor(U519) Mixed transformations(M881)	Understanding similarity(US51) Finding unknown sides in similar shapes(US78)	Understanding congruence(U790) Congruent triangles(U866) Constructing triangles(U187)	Types of data(U322) Presenting data and making conclusions(U571) Comparing populations using diagrams(U520) Choosing suitable averages and solving problems(U717)		Plotting scatter graphs(U199) Interpreting frequency t Interpreting scatter graphs(U277) Finding averages from g Using lines of best fit(U128)		y tables with grouped U312) n grouped data(U877) frequency polygons(U840)	Understanding column vectors(U632) Adding and subtracting column vectors(U903) Multiplying column vectors by a scalar(U564) Identifying parallel vectors(U660)

		Week 1	Week 2	Week 3	Week 4	Week 5	Wee	ek 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
		M1		M2				M3		M4		M5		M6
	Unit	Percentages		Surface Area and Volume				Simultaneous Equations		Formulae	4	Trigonometry		Constructions
Year 10	Skills	Compound interest calculations(U332) Growth and decay(U988)		Finding the surface are Finding the surface a Finding the surface are Finding the surface area of *Topic is included again in Year 11 Fo taught later for classes that are likely	ea of pyramids(U871) area of cones(U523) rea of spheres(U893) ea of frustums*(U334) composite shapes*(U561) oundation so, if preferable, it can be y to follow the Foundation scheme.	Finding the volume of pyramids(U484) Finding the volume of cones(U116) Finding the volume of spheres(U617) Finding the volume of frustums*(U350) Finding the volume of composite shapes*(U543) *Topic is included again in Year 11 Foundations oil preferable; it can be taught later for classes that are likely to follow the Foundation scheme.	Solvir Solvin Solving simu Constr	ng simultaneous equatic elimination(U760) ng simultaneous equatic substitution(U757) ultaneous equations gra rructing and solving simu equations(U137)	ons using ons using uphically(U836) ultaneous	Changing the subjects of formulae with two or more steps(U181) Changing the subject when the subject appears more than once(U191)	Finding Finding u Using ti An Calcula *Topic is included again in Yo	Understanding sin, cos and tan( unknown sides in right-angled t nknown angles in right-angled t he exact values of trigonometric gles of elevation and depression ting with trigonometry and bea ar 11 Foundation so, if preferable, it can be to follow the Foundation scheme.	U605) iangles(U283) ratios(U627) ratios(U627) rings*(U164) taught later for dasses that are likely	Constructing loci(U820)
		M7		M	18	M9		M10		M11		M12	M13	
	Unit	Linear Graphs		Real life Graphs		Set Notation	Tree Diagrams		Compound Measures	Ratio		Gra	aphs	

Year 10	Skills	Equations of pa Finding the equation o gradient and Finding the equation of points on th Equations of parallel and µ *Topic is 'Higher only' so c to classes that are likely sche	rallel lines(U377) f a straight line from its a point(U477) a straight line from two le line(U848) perpendicular lines*(U898) does not need to be taught to follow the Foundation eme.	Plotting linear rea Using and finding equa graphs Sketch graphs of v	-life graphs(U652) titions of linear real-life (U862) water flows(U896)	Venn diagrams with set notation(U748) Using set notation(U296)	Tree diagrams for ind Tree diagrams for de	ependent events(U558) pendent events(U729)	Calculating with density(U910) Calculating with pressure(U527)	Combining Calculating with rati Changing I	ratios(U921) os and algebra(U676) ratios(U865)	Calculating acceleration from velocity-time graphs(U562) Plotting velocity-time graphs(U937)	Graphs of cubic functions(U980) Graphs of reciprocal functions(U593) Graphs of exponential functions*(U229) *Topic is 'Higher only so does not need to be taught to classes that are likely to follow the foundation scheme.
	Unit	M14	M15	M16	M17	M18	M19	M20	M	121		M22	•
Year 10)		Sequences Position-to-term rules for arithmetic sequences(U498) Position-to-term rules for geometric sequences(U978) Position-to-term rules for quadratic sequences(U958)Position- to-term rules for quadratic sequences(U206) Position-to-term rules for geometric sequences(U958) Special sequences(U680)	Handling Data Sampling and bias(U162) Capture- recapture(U328)	Proportion Interpreting direct proportion equations(U640) Interpreting inverse proportion equations(U364) Graphs of direct and inverse proportion(U238)Construct ing direct proportion equations(U407) Constructing inverse proportion equations(U407) Graphs of direct and inverse proportion(U238)	Enlargement by a positive or negative scale factor(U134) Combining transformations(U766)	Finding error intervals(U657) Finding error intervals for truncated numbers(U301) Finding bounds for calculations(U587)	Indices Index rules with positive indices(U235) Index rules with negative indices(U694) Simplifying expressions using index laws(U662). Estimating roots and powers(U299) Indices of the form 1/a(U985) Indices of the form a/b(U772)	Converting fractions to recurring decimals(U550) Converting recurring decimals to fractions(U689)	Expanding doub Factorising quadratic + x 2 +bx- Factorising the differen Factorising to solve quadr x2 +bx+c=0(U228)Expan Completing th Factorising quadratic + ax2 +bx Finding the turning poin completing th	le brackets(U768) expressions of the form +c(U178) ce of two squares(U963) ratic equations of the form ding triple brackets(U606) e square(U397) expressions of the form +c(U858) it of a quadratic graph by e square(U769)	Interpreting frequency tables with grouped data(U312) Finding averages from grouped data(U877). Drawing cumulative frequency graphs(U182) Interpreting cumulative frequency graphs(U642)	Drawing stem-and- Interpreting stem-an Drawing line Interpreting line Drawing and interpreting Drawing and interpreting t Comparing populatic cumulative frequ	-leaf diagrams(U200) d-leaf diagrams(U909) graphs(U590) ne graphs(U193) frequency polygons(U840). x plots(U879) pox plots(U837) pos plots and ency graphs(U507)
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Unit	Graphs	Number Skills Review	Algebraid	rractions	Equa	ations	An	igles	Pythagoras and	d Trigononmetry	Surface Are	a and Volume
Year 11	Skills	Estimating gradients of non-linear graphs using tangents(U800) Calculating distances from velocity-time graphs(U611) Estimating areas under non-linear graphs(U882) Equations of circles and tangents(U567) ***1n line with science for all year 11 students***	Finding the lowest common multiple(U751) Finding the highest common factor(U529) Prime factor decomposition(U739) Finding the HCF and LCM using prime factor decomposition(U250) Ordering fractions and mixed numbers(U439) Adding and subtracting mixed numbers(U439) Adding and subtracting mixed numbers(U793) Multiplying with mixed numbers(U224) Dividing with mixed numbers(U538)	Simplifying expressions Simplifying algebraic fracti factors(U103) algebraic fractions br bracket Simplifying algebraic fracti bracket Adding and subtracting a Multiplying algebrai Dividing algebrai	using index laws(U662) ons by cancelling common Simplifying y factorising into one (U437) ons by factorising into two s(U294) algebraic fractions(U685) aic fractions(U457) c fractions(U824)	solving equations with two or more steps(U325) Solving equations with the unknown on both sides(U870) Solving equations with the unknown in the denominator(U505) Constructing and solving equations(U599) Factorising to solve quadratic equations of the form x 2 +bx+c=0(U228) Solving quadratic equations graphically(U601)	Solving simultaneous equations using elimination(U760) Solving simultaneous equations using substitution(U757) Solving simultaneous equations graphically(U836) Constructing and solving simultaneous equations(U137)	Combining angle facts(U655) Angles on parallel lines(U826) Using quadrilateral properties to find angles(U329) Angles in polygons(U427)	Angles subtended at the centre or circumference of a circle(U459) Angles in segments and cyclic quadrilaterals(U251) Circle theorems for chords and tangents(U489) Alternate segment theorem(U130)	Using Pythagoras' t Applying Pythagoras Finding unknown : triangl Finding unknown a triangl Using the exact values of Angles of elevation : Calculating the trigono The sine The cosine The area Using Pythagoras' t Trigonometry in	heorem in 2D(U385) 'theorem in 2D(U828) sides in right-angled es(U283) ingles in right-angled es(U545) trigonometric ratios(U627) and depression(U967) metry and bearings(U164) rule(U952) er rule(U591) rule(U592) theorem in 3D(U541) 3D shapes(U170)	Finding the surface area c Finding the surface area c Finding the surface area c Finding the volume of c Finding the volume of c Finding the volume of c	of cones and spheres(U771) irea of frustums(U334) of composite shapes(U561) cones and spheres(U426) e of frustums(U350) composite shapes(U543)
	Unit	M8		M9	M10	M11	M12	M13	N	114	M15	M16	M17
		Statistical Diagrams	Prol	oadility	Inequalities	Vectors	Percentages	Compound Measures	Ratio and	Proportion	Standard Form	Sequences	Linear Graphs
Year 11 (Foundation)	Skills	Drawing pie charts(U508) Interpreting pie charts(U172) Plotting scatter graphs(U199) Interpreting scatter graphs(U277) Using lines of best fit(U128)	Probabilities of mutual Sample space Expected results from re Venn diagrams wit Using set n Tree diagrams for idd Tree diagrams for odd Experimental p	lly exclusive events(U683) diagrams(U104) speated experiments(U166) th set notation(U748) otation(U296) lependent events(U558) spendent events(U729) robabilities(U580)	Solving inequalities with the unknown on both sides(U738) Solving double inequalities(U145) Constructing and solving inequalities(U337)	Adding and subtracting column vectors(U903) Multiplying column vectors by a scalar(U564) Identifying parallel vectors(U660) Solving geometric problems using vectors(U781)	Percentage change with a calculator(U671) Finding original values in percentage calculations(U286) Finding the percentage an amount has been changed by(U278) Compound interest calculations(U332) Growth and decay(U988)	Calculating with speed(U151) Calculating with rates(U256) Calculating with density(U910) Calculating with pressure(U527)	Combining ratios(U921) Calculating with ratios and algebra(U676) Changing ratios(U865)	Solving direct proportion word problems(U721) Solving inverse proportion word problems(U357) Currency conversion(U610)	Multiplying and dividing numbers in standard form(U264) Adding and subtracting numbers in standard form(U290) Standard form with a calculator(U161)	Position-to-term rules for arithmetic sequences(U498) Position-to-term rules for sequences of patterns(U978) Position-to-term rules for geometric sequences(U958) Special sequences(U680)	Plotting straight line graphs(U741) Finding equations of straight line graphs(U315) Interpreting equations of straight line graphs(U669) Equations of parallel lines(U377) Finding the equation of a straight line from its gradient and a point(U477) Finding the equation of a straight line from two points on the line(U848) V16
	Unit	Statistical Diagrams	Pro	bability	Inequalities	Surds	Fun	ctions	Tramsformations	Iteration	Similarity	Pr	roofs

Year 11 (Higher)	Skills	Drawing histograms with equal class widths(U185) Drawing histograms with unequal class widths(U814) Interpreting histograms(U983) Calculating averages from histograms(U267)	Graphs of linear inequalities(U747) Solving quadratic inequalities(U133)	Multiplying and dividing surds(U633) Simplifying surds(U338) Adding and subtracting surds(U872) Expanding brackets with surds(U499) Rationalising denominators containing a single term(U707) Rationalising denominators containing two terms(U281)	Substituting into functions(U637) Substituting into composite functions(U895)	Finding composite functions(U448) Finding inverse functions(U996)	Translating graphs(U598) Reflecting graphs(U487) Transforming graphs(U455) Graphs of trigonometric functions(U450)	Using recurrence relations(U171) Substituting into iterative formulae(U434) Finding approximate solutions to equations using iteration(U168)	Finding the perimeter and area of similar shapes(U630) Finding the surface area and volume of similar shapes(U110)	Writing algebraic proofs(U582) Solving geometric problems using vectors(U781) Geometric proofs with vectors(U560)	Geometric proofs with angle facts(U471) Geometry proofs with congruence and similarity(U887) Proving the circle theorems(U807)
	Unit										
Year 11 (Foundation)	Skills		Revision								
	Unit										
Year 11 (Higher)	Skills		Revision								