Con	tent that	is for GCSE Mathematics only is high	nlighted in green			
			Hegarty Clip	Red	Amber	Green
	• Unit	1: Number				
	0	Place value	13			
	0	Read, write & order numbers in words	14			
		& figures				
	0	4 rules, to include long multiplication	1-11, 18, 19,			
		& harder division	21, 22			
	0	Multiply / divide by multiples of 10	15,16			
	0	BIDMAS / BODMAS	24,44			
	0	Problems involving the 4 rules	20, 23			
	0	Use of inverse operations	7,8,38			
	• Unit	2: Angles & basic angle properties				
	0	Understand that angles are part of a turn	455			
9	0	Name & recognise angles	455, 456			
	0	Estimate, draw & measure angles,	457-461			
	0	including reflex angles Angles as fractions of a turn	455			
	0	Angles at a point on a straight line	477, 478			
	0	Angles at a point	812,813			
	0	Vertically opposite angles	480			
	0	Angles in triangles	485			
	0	Exterior angle of a triangle is equal to the				
		sum of the interior angles at the other 2 vertices				
	0	Angles in quadrilaterals	560			
	0	Use the 8 points of the compass to show direction.				
	0	Identify parallel and perpendicular lines	456			

Cor	Content that is for GCSE Mathematics only is highlighted in green.						
		Hegarty Clip	Red	Amber	Green		
	Unit 3: Types of number						
	 Even, odds & primes 	25, 28					
	 Factors & multiples 	27, 33					
	 Squares & cubes 	99, 100					
	 Square & cube roots 	101					
	 Powers & roots 	102					
	 Reciprocals 	71					
	 Write numbers in index form 	102, 103					
	 Find values of indices eg. 6³ 						
	 Prime factors in index form 	29, 30					
9	 Interpret numbers written in standard form 	121, 123					
	Unit 4: Negative numbers						
	 The number line 	37					
	\circ < or >, < or >						
	 Order positive & negative numbers 						
	 Addition & subtraction of positive/negative 	39, 40, 41					
	numbers	42.42					
	 Multiplication & division of positive/negative numbers 	42, 43					
	 Rules for signs 						
	 Problems involving positive & negative 	44					
	numbers						
	 Understand & use temperature charts 						
	Unit 5: Fractions						
	 Fractions from pictures & words 	57, 58					
	 Find fractions of quantities 	77					
	 Identifying & calculating halves 	77					
	 Shade fractions 	58					
	 Improper fractions & mixed numbers 	63, 64					
9	 Simplify fractions 	61					
	 Equivalent fractions 	59					
	• One number as a fraction of another	62					
	• Order fractions	60,					
	 4 rules of basic fractions 	65-70					
	 Problems involving fractions 	80					
	 Find fractional changes (increase & decrease) 	78					

Con	tent that is for GCSE Mathematics only is highl	ighted in green.			
		Hegarty Clip	Red	Amber	Green
	Unit 6: Decimals				
	 Place value 	45			
	 Order decimals 	46			
	 4 rules of decimals 	47-50, 743-748			
	 Decimal of a quantity 				
	Unit 7: Rounding & Estimating				
	 Round to the nearest 10, 100, 1000 	17			
	 Round to the nearest whole number 	17			
	 Round to a given number of decimal places 	56			
	 Round to a given number of significant figures 	130			
	 Estimate answers by rounding each number 1st 	131			
	Unit 8: Percentages				
	 Percentages as pictures 	81			
	 Percentages of quantities with/without a calculator 	84-87			
9	 One number as a percentage of another with & without a calculator 	97			
5	 Percentage increase/decrease, profit/loss 	88, 761			
	 Simple interest 	93			
	 Saving & borrowing 				
	 Compound interest & depreciation 	94			
	Unit 9: Ratio and Proportion				
	 Simplify ratios 	329			
	$\circ~$ Use ratios to find unknown quantities eg as	864, 865			
	in scale diagrams or maps				
	 Division in a given ratio 	332			
	Direct/inverse proportion	339,342			
	 Unit 10: Fractions, decimals, ratios & 				
	percentages				
	 Interchange between F,D,P & R 	52,55,73-76,82,83, 330		ļ	
	 Use equivalences between FDPR 	52,55,73-76,82,83			
	 Order & compare sizes of FDPR 	52,55,73-76,82,83			
	 Recognise that recurring decimals are 	53,54			
	exact fractions				

 Recognise that some exact fractions are 	53,54		
recurring decimals			

Cont	ent that is for GCSE Mathematics only is highlighte		ntent in gre	y is for Entr	y Level only.
		Hegarty Clip	Red	Amber	Green
	• Unit 11 : Measure				
	 Standard units of measure for length, mass & capacity 	691,			
	 Make sensible estimates for lengths, capacity & weight 				
	o Time	709-711			
	• Reading of an analogue clock.				
	 Read & interpret scales, including decimal ones 				
	 Change metric units for length, mass, capacity, area & volume 	691-704			
	 Interchange between metric & imperial 	705,706			
	Unit : 12 Interpret & Use Mathematical				
	Information.				
	 Deal with dates, calendar etc 				
	 Timetables inc. two way tables 	422			
9	 TV schedules 				
	 Distance charts 				
	 Booking holidays 				
	Unit 13: Simplifying in Algebra				
	 Use letters to represent 	151, 152			
	words/numbers				
	 Add/subtract in algebra – collecting 	156,157			
	like terms				
	 Multiply in algebra 	158,173			
	 Remove single brackets 	160			
	 Remove pairs of single brackets and collect like terms 	161			
	 Write algebraic expressions for worded problems 	153			
	 Form, simplify expressions involving sums, differences, products & powers 				

Cont	ent that is for GCSE Mathematics only is highlight	ed in green. Cont	ent in grey	is for Entry	/ Level only.
		Hegarty Clip	Red	Amber	Green
	• Unit 14: Substitution in Algebra				
	 Function machines 				
	 Inputs to and outputs from a single 				
	number machines				
	 Substitution of positive & negative 	780.781,783,7			
	whole numbers, fractions & decimals	84,786			
	into simple formulae expressed in				
	words or symbols				
	• Unit 15: 2-D shapes.				
	 Types of triangles & their properties 	823			
	 Types of quadrilaterals & their properties 	824-826			
	 Name & recognise polygons & regular polygons 	821, 822,			
	 Recognising & drawing 2-D shapes 				
	 Name & describe parts of a circle 	592			
	 Congruent & similar shapes 	680, 608			
9	Unit 16 : Coordinates.				
	 Coordinates in all 4 quadrants 	199			
	 Read positive & negative coordinates 	199			
	 Set up X & Y axes 	199			
	 Plot positive & negative coordinates 	199			
	 Maps & grids 				
	 Find the coordinates of points identified by geometrical information 				
	 Location determined by distance from a 				
	given point and angle made with a given line				
	• Unit 17: Constructions.				
	 Draw and measure lines 				
	 Parallel & perpendicular lines 				
	 Bisect a given line 	660			
	 Bisect a given angle 	661			
	 Construct triangles & 2-D shapes accurately, including circles 	683, 666, 659			

Con	ent that is for	GCSE Mathematics only is highlight	ted in green. Cont	tent in grey	is for Entry	Level only.
			Hegarty Clip	Red	Amber	Green
	• Unit 18: 3-	D shapes.				
	o Hori	zontal & vertical surfaces	832			
	○ Fac	es, edges & vertices	832			
	o Nam	ne, recognise & draw 3-D shapes	832, 829, 830			
	o Pris	ms & pyramids				
	○ Inte	rpret & draw nets	833-836			
	⊙ Use shaj	and draw 2D representations of 3D bes	837-844			
	o Drav	w on isometric paper				
	• Unit 19: M	oney Basics				
		tify and make different amounts of ey, using a combination of coins	743, 744			
	o Gro	cery bills	746			
•	o Calc	ulating change from £1	747, 748			
9	o Calo	culating change from £10.	747, 748			
		nding prices to the nearest £, to nate the total cost.				
	mult who	ing money problems; including iplying pounds and/or pence by a le number; dividing pounds and/or ce by a whole number.	745, 746, 749, 750, 751			
	• Unit 20: S	equences & nth terms.				
		ognise & describe patterns in number imber sequences	196			
	o Find	the next number(s) in a sequence	197			
		cribe in words the rule for the next	197			
	⊙ Spa	tial patterns & sequences	196			
	o Finc term	l values in a sequence when given nth				

Cont	tent that is for GCSE Mathematics only is highlig	hted in green. Cont	ent in gre	y is for Entry	/ Level only.
		Hegarty Clip	Red	Amber	Green
	 Unit 21: Data: collecting, recording & representing. 				
	 Sort, classify, tabulate qualitative (categorical), discrete or continuous quantitative data 	392, 393			
	 Tallying & tally tables 	401			
	 Construct & interpret pictograms & bar charts for qualitative data 	426			
	 Construct & interpret vertical line graphs for discrete data 	425			
	 Construct line graphs for values of a variable at different points in time 	425			
	 Temperature charts 				
	 Draw pie charts by calculating angle size 	427			
	 Calculation of angle from percentages on chart 	428			
	 Extract information from pie charts 	429			
	 Find frequencies from given angles on pie charts 	429			
10	 Group discrete or continuous data into class intervals of equal widths Simple cases of constructing and interpreting grouped frequency diagrams 	402, 403			
	Unit 22: Basic Probability				
	 Use words to describe likelihood 	349			
	 Understand the notion of chance 				
	 Outcomes of a single event 	350			
	 Probability scale in words 				
	 Recognise that impossible = 0 & certain = 1 and that the probability of an event will lie on a scale between 0 & 1 	349			
	Unit 23: Perimeter, area, volume & density.				
	 Find perimeters of shapes 	548-552			
	 Find areas of shapes 	553-559			
	 Parts of a circle 	592			
	 Find the circumference & area of circles 	534-536, 539-54	1		

Foundation Checklist

• Problems involving the above to include inverse problems & semicircles etc.

- $\circ~$ Surface area of cubes, cuboids
- $\,\circ\,\,$ Volume of cubes, cuboids

584		
567-569		

Cont	ent that is for GCSE Mathematics only is highligh	ed in green. Conte	ent in grey i	s for Entry I	∟evel only.
		Hegarty Clip	Red	Amber	Green

Cont	ent t	hat is	s for GCSE Mathematics only is highlight			y is for Entry	y Level only.
				Hegarty Clip	Red	Amber	Green
	• (Present the second s				
			 Angles formed in parallel lines corresponding angles (F)alternate angles (Z)interior angles (C or U) 	481-483			
		0	Problems involving all angle properties	488,489			
	• (Unit 2	8: Angles in polygons.				
		0	Interior angles in polygons	560-562			
		0	Exterior angles in polygons	563, 564			
		0	Tessellate shapes				
			29: Construct & interpret graphs in day life				
		0	Construct, use & interpret conversion graphs	712, 713			
			Construct, use & interpret graphs that describe real-life situations	899			
10		0	Construct, use & interpret travel graphs	874, 875			
			Find distance & time from the travel graph	874, 875			
			Calculate speed = distance ÷ time using the travel graph	874, 875			
		0	Interpret graphical representation used in the media				
	• (0: Solving Equations.				
		0	Recap algebra already covered				
		0	Form equations	176, 177			
		0	Solve equations which require 1 step	178			
		0	Solve equations which require 2 steps	179			
		0	Solve equations with x-terms on both sides	184, 185			
		0	Solve equations with brackets				
		0	Solve simple fractional equations				
		0	Set up & solve linear equations with brackets	188			
	• (1: Scatter diagrams.				
		0	Set up axes for scatter graphs, plot points	199			
		0	Types of correlation	453,454			
10		0	Interpret the scatter diagram	453,454			
		0	Draw the line of best fit by eye	453,454			
		0	Understand & interpret what the line of best fit represents	453,454			

 Obtaining information from scatter graphs 453,454 	

Cont	tent that is for GCSE Mathematics only	is highlighte	ed in green. Con	tent in grey	is for Entry	Level only.
			Hegarty Clip	Red	Amber	Green
	Unit 32: Probability.					
	 Definition of probability 					
	 Understand & use the vocabular probability, including notions of u & risk 		349			
	 Understand & use the probability from 0 to 1 		349			
	 Calculate theoretical probabilities events based on equally likely or 	utcomes	350-352			
	 Probability of an event not happed 	-	353			
	 List all possible outcomes of 1 & 	2 events	358, 670			
	Possibility space diagrams & calco probabilities of 2 events	ulate	358, 359			
	 Expected number of outcomes 		355			
	 Basic use of AND/OR rules 					
	Unit 33: Transformations.					
	 Lines & planes of symmetry & re 	eflection	827, 828			
11	 Reflection of 2D shapes in x - axis, y - axis, y = +/- x, y = a 	, x = a	639, 640,641			
	 Rotational symmetry & order 					
	 Rotate about a given point clockwise/anticlockwise through angle 	a given	648, 649			
	 Translation – using instructions & vectors 	& column	637			
	 Enlarge a shape using a given s 	cale factor	642			
	 Enlarge a shape from a given ce enlargement. Positive scale factor to include fractional scale factors 	ors only,	643			
	Unit 34: Questionnaires.					
	 Design & criticise questions on 		399, 400, 394			
	questionnaires to include 'fairnes	ss' & 'bias'	333, 400, 394			
	 Specify & test hypotheses, taking 					1
	account the limitations of the dat	•				
	available					

Con	Content that is for GCSE Mathematics only is highlighted in green. Content in grey is for Entry Level only.				
		Hegarty Clip	Red	Amber	Green
	Unit 35: Algebraic graphs.				
	 Revision of plotting coordinates & setting up X & Y axes 	199			
	 Graphs of y=a & x=a 	204			
	 Tables of values & drawing linear graphs of type y=mx + c (or y=ax + b) 	205, 206			
	• Steepness of lines & lines that are parallel	214			
	Unit 36: Relative Frequency.				
11	 Calculate estimated probability based on experimental evidence 	357, 356			
	 Use of graphical representation of relative frequency against number of trials. 	357			
	 Understand long term stability of relative frequency is expected. 	356, 357			
	 Compare estimated probability to theoretical probabilities. 	357			
	Unit 37: Venn Diagrams.				
	 Understand and use Venn diagrams to solve problems 	383			
	 Understand and interpret basic set notation 	383			
	Unit 38: Compound measures				
	 Use of speed = distance ÷ time 	716-724			
	 Use of miles per gallon 	738			