

Topic	M5 =DEFG	M6 =C*C	M7 =B
1	Probability words, scale, listing outcomes, probability as fraction, probs add up to 1, expectation	Listing 2 events, relative frequency, experimental prob, understand that greater sample size gives better estimate of probability	Product rule. There are $m \times n$ ways of doing m things and then n things. Mutually exclusive events $P(A)+P(B)$ Independent events $P(A) \times P(B)$ Tree diagrams
2	Non Cal calculations Estimate, approximate		
3.	triangular, square and cube numbers Generate terms of a sequence	n th term linear sequence	n th term non-linear sequences
4	Reflection in axes Rotate around origin Translate Enlarge Whole number Scale factor	Reflection in lines parallel to axes Rotate around any point Translate using vector Enlarge Whole number Scale factor and how this effects area Congruent	Combined transformations Reflections in $y=\pm x$ Enlarge fraction number Scale factor and how this effects volume Lengths, areas and volumes of similar shapes
5	Approximate nature of measurement Maps and scales	Bearings Sum of angles in a triangle then into any polygon	
6	Simplify ratio Divide in a ratio Real life ratios like exchange rates, best buys		
7		Index laws for positive powers	Index notation for zero, positive and negative powers. Index laws in algebra Standard form. Use surds and π in exact calculations
8	Conversion graphs, Travel graphs	Trial and improvement Linear inequalities with one variable Change the subject	Linear inequalities with 2 variables on a graph, Change the subject with power, root or more than one term, Direct proportion including graphical and algebraic
9		Decimal to Binary Binary to Decimal	
10		Solve two linear simultaneous equations graphically	Set up and solve two linear simultaneous equations algebraically
11.		Generate points and plot graphs of simple quadratic functions, and use these to find approximate solutions for points of intersection lines of the form $y = \pm a$ only	Generate points and plot graphs of simple quadratic functions, and use these to find approximate solutions using $y = mx + c$ Recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions, the reciprocal function $y = \frac{a}{x}$
12.	Draw triangles and other 2D shapes using a ruler and protractor	Use the standard ruler and compass constructions Identify the loci of points, to include real life problems	