REVISION LIST – EDEXCEL PAPER 3 – TUESDAY 13TH JUNE 2017

Bold = Prioritise this. This list is NOT exhaustive and I CANNOT guarantee I've covered every topic that may crop up.

To get a 4/5 at foundation, focus revision on the following topics

NUMBER
Negative numbers
Negative indices
Ordering decimals
Standard form calculations

ALGEBRA
Changing the subject
Understand equation/expression/formula
Coordinates – mid-points? Distance between two points?
Plotting graphs
Interpret the gradient and intercept of a straight line graph
Solving linear equations with unknowns on both sides
Forming and solving equations (angles?)
Solve a pair of linear simultaneous equations
Solve a linear inequality

RATIO/PROPORTION
Reverse percentages
Compound measures (density)
Best buys

SHAPE
Compass constructions
Angle relationships – explaining solutions geometrically – particularly parallel lines and circle theorems
Congruence (SSS, SAS, AAS, RHS)
Right angled trigonometry (maybe look at multi-stage questions including Pythagoras?)
Transformations – englargements, translations
Understand the different parts of a circle
Faces, Edges, Vertices
Area of trapezium and compound shapes
Volume/Surface area

HANDLING DATA + PROBABILITY
Tree diagrams
Frequency polygons
Venn Diagrams
Time series
Mean from a frequency table
Stem and leaf diagrams (finding the median, range etc)

At Higher Tier – all of the foundation PLUS….

NUMBER
Combinations
Surds
Bounds of accuracy for calculations (for example if a = b/c what are the bounds of accuracy of a)

ALGEBRA
Using the quadratic formula
Functions – composite and inverse
Exponential functions (eg, given 2 points find a and b such that $y = a^{bx}$)
Estimate the gradient from a graph and interpret (velocity-time graphs or financial graphs?)
Completing the square
Iteration
Quadratic inequalities
Geometric sequences
Estimating the area under a curve (and in context?)
Changing the subject when the subject appears more than once.

SHAPE
Negative enlargements
Bearings
Similarity applied to area and volume
Sine and cosine rules
Three dimensional trigonometry

HANDLING DATA + PROBABILITY
Box and whisker diagrams – compare and contrast 2
Capture/Recapture method (eg in a pond, 100 fish are captured, tagged and released. In a further sample 20 are captured and 2 are tagged – estimate the fish population of the lake)
Drawing a cumulative frequency diagram
Drawing a histogram