Year 9M,A&T Personal Learning Checklist (PLC)			
13. Primes, powers and roots	**R**	**A**	**G**
13.1 Prime factors, highest common factor, lowest common multiple			
13.2 Convert between fractions and decimals (including recurring decimals).			
13.3 Fractional indices			
13.4 Laws of indices (including algebraic)			
13.6 Estimate powers and roots.			
13.7 Surds (simplify and rationalise)			
14. Calculation and structure			
14.1 Product rule for counting.			
14.2 Estimation and approximation.			
14.3 Truncation.			
14.4 Inequality notation and error intervals.			
14.5 Calculate with numbers in standard form.			
14.6 Upper and lower bounds			
16. Ratio and proportion			
16.1 Simplify a ratio.			
16.2 Split an amount in a given ratio.			
16.3 Ratio, fractions and percentages.			
16.4 Apply ratio to real contexts and problems (e.g. conversion, comparison, scaling, mixing, concentrations)			
16.5 Direct and inverse proportion (equations and graphs).			
15. Sequences and straight-line graphs			
15.1 Arithmetic sequences.			
15.2 Special sequences including Fibonacci-types.			
15.3 y = mx + c and parallel and perpendicular lines.			
15.4 Equation of a line, given two points, or one point and gradient.			
15.5 Gradients and intercepts algebraically and graphically.			
17. Shapes and construction			
17.1 Ruler and compass constructions.			
17.2 Loci.			
17.3 Angle facts including parallel lines; angle proofs.			
17.4 Properties of special types of quadrilaterals.			
17.5 Congruence criteria for triangles.			
17.6 Interior and exterior angles of polygons			
17.7 Properties of a circle.			
17.8 Circle theorems			
18. Transformation and similarity			
18.1 Similarity.			
18.2 Construct congruent and similar shapes linked to transformations.			
18.3 Enlargement (fractional and negative scale factor).			
18.4 Invariance.			
18.5 Plans and elevations of 3-D shapes.			
18.6 Translations and 2-D vectors.			