Rivers KS4 Maths Year SOW (Scheme of work)

MATHS - AUTUMN 1		MATHS - SPRING 1		MATHS - SUMMER 1	
	Number facts; Calculating using column methods 4 operations; Rounding; BIDMAS; Factors; Primes; Multiples; Products of Prime; Place value; Metric conversions; Estimation; Rounding; significant figures; Square numbers/ roots.	Pythagoran Theorem We we have the second	Lengths, area and volume of 2d/3d shapes; congruent shapes; parts of a circle; angles facts/ in parallel line/triangles/ordinary polygons; tessellations; vertices/edges/faces; Bearings; Plans/ elevations; Venn diagrams (set notation)	$ \begin{array}{c} \mbox{for} & \mbox{for} \\ \mbox{for} \ \mbox{for} \\ \mbox{for} \ \mbox{for} \\ \mbox{for} \ \mbox{for}$	+ - / x Fractions; reciprocals; ordering decimal; Sensible estimates; Proportion; Scale probability; Tree diagrams;
Stretch and Challenge topics	Standard form; Percentages (amount/change/reverse); Ratio; Frequency trees; sequencing; Nth term.	Stretch and Challenge topics	Compound units; Pythagoras' theorem; Trig values; Volume/surface area; Angles in polygons; Nets;	Stretch and Challenge topics	Percentages (compound / depreciation); Best buys; frequency tables/polygons; Estimate mean; Averages from a table.
Mid-term	Selected GCSE questions related to	Mid-term	Selected GCSE questions related to	Mid-term	External GCSE
Assessment	areas of studied.	Assessment	areas of studied.	Assessment	examinations.
Assessment objectives	N1-6, N11 N13, N14, A14 N9, N12, R4, R5, R9, P1, A13, A15	Assessment objectives	N13, G14, G9, G11, G1, G15, G13, P6 R1, G6, M20, G21, G16, G13	Assessment objectives	N2, N3, N1, N13, R7, R2, P1-4 P6 R9, S2, S4, S1, S5
MATHS - AUTUMN 2		MATHS - SPRING 2		MATHS - SUMMER 2	
$\begin{array}{c} \begin{array}{c} 2 \\ 3 \\ 3 \\ 3 \\ 3 \\ 4 \end{array} \begin{array}{c} 2 \\ 3 \\ 4 \end{array} \begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \end{array} \begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \end{array}$	Calculator skills; Listing outcomes; Frequency trees/ two way tables; Percentages; Decimals; Fraction of amount; Function machines; simplifying expressions; laws of indices; ratio 1:n as a fraction; ratio recipes/currency	(0, 3) (0, 3) (0	Co-ordinates; constructions; Transformations (translations / reflections / enlargements / rotations); Line symmetry/ rotational; Circumference & Area of circle;	Mean Median Mode Range Her District Date, Her District Date, Her District Date, Her District Date, Her District Date, Her District Her District Her Howe Her Howe Her Howe Her Howe Her Howe Her Howe Her Howe	Primary and secondary data - Pictograms; Pie charts; Bar charts; Scatter graphs; Stem and Leaf; Averages;
Stretch and Challenge topics	Algebra- expanding; factorising; solving equations; substitution;	Stretch and Challenge topics	Trigonometry; y=mx+c; Gradient of a line; Line graphs; Quadratic graphs; Loci	Stretch and Challenge topics	Frequency polygons; Averages from a table.
Mid-term Assessment	Mock Examinations	Mid-term Assessment	Selected GCSE questions related to areas studied.	Mid-term Assessment	Selected GCSE questions related to areas of studied.
Assessment objectives	N2, P1, R9, N2, N8, R3, A7, A4, R4-7 A1-5	Assessment objectives		Assessment objectives	

*Grade 5 topics will be covered during 1:1 tutoring sessions – including: Arc Length/ Area of a sector/ Exact Trig Values/ Volume and surface area of a sphere or cone/ Error Intervals/ Factorising Quadratics/ Changing the subject/ Simultaneous Equations.

Nb: Where necessary, some lessons within each half term, may cover aspects of the curriculum from previous terms in order to personalise learning for the students. DIRT time will be included to complete outstanding areas of the course.