S1 Course Overview

The table below indicates the topics and the time frame in which they are taught during S1. The topics listed within a timeframe aren't necessarily taught in the order listed, but will be covered within the time frame and before an assessment. (This is a guide and is subject to change).

Time Frame	Topic	Description	Checklist
August - September	New Assessment Non-Calc and Calculator	• This assessment along with information provided by the primaries will be used to create/set classes in S1. No preparation is required for this assessment. Setting takes place near the September weekend.	
	Whole Numbers	• Read/interpret worded questions (decide whether to +,-,x or ÷) • Place value Thousands, Hundreds, Tens & Units (TH H T U etc) • Sum construction (chimney sum (+,-,x), bus-stop (÷)) • Write worded numbers using digits & vice versa. • Reading basic scales (preparation for Home economics in S2)	
	Calculator Use	• How to use a basic calculator relating to multi-stage calculations. • Know how to put fractions into a calc e.g. ½=0.5, ¼=0.25, ¾=0.75 etc. • Money problems (mix p and £). E.g. know that 5.3 means £5.30 • How to transcribe calculations as working. (emphasis on showing working before using calc to retain answer)	
	Measurement_1	• Use of ruler to draw/measure (mm & cm) • Use a protractor/(compass) to measure/draw • Triangle construction (incorporating use of a ruler and protractor) • Measure weight/liquid capacity-linking back to reading scales • Metric system (unit conversion taught at a later date)	
	Co-ordinates_1	• Plot/read points in 4 quadrants and in the context of constructing shapes	
September - October	Decimals	• Place value, relation to fractions (10ths, 100ths, 1000ths) • Ordering decimal numbers (highest to lowest & vice versa) • Reading decimal scales • Sum Construction, including money problems & dealing with unusual quantities (104.5p per litre etc)	
	Algebra_1	• Meaning/use of algebra & Simplifying expressions (collecting like terms) • Substitution (replacing a letter with a number)	
	Fractions	• Meaning of fractions (numerator/denominator) • Recognise and create Equivalent fractions • Simplifying Fractions • Fraction of a quantity (Find ¾ of 20)	

		• Extension – change a fraction from top heavy to a mixed number & mixed fraction back to top heavy $\frac{23}{4} = 5\ \frac{3}{4}$ • Extension – add/subtract fractions	
	BODMAS	• Rules of order of operation- the order in which a sum with more than one operation must be done. BRACKETS, ORDER, DIVISION, MULTIPLICATION, ADD, SUBTRACT e.g. $5 \square (3 + 4)$	
	Rounding	• Round to the nearest whole number/10/100/1000 and to a particular decimal place	
	Basic Operations_whole Numbers	• Whole Number 4 operations (+,-,x,÷) • Reinforce techniques and importance of layout. • Multiply/divide whole numbers by 10,100 & 1000 • Extension x20,300, ÷40,5000 etc. & Long multiplication	

October - December	Ratio	• Introduction to the concept of ratio (what they are used for and layout) • Simplifying ratios (e.g. 15 : 3 becomes 5 : 1) • Ratio shares (e.g. share £124 in the ratio of 3 : 1)	
	Negative Numbers	• Look at negative numbers in context (esp. temperature), • Basic add/subtract with negatives, involving number line (e.g. -2 + 5, 7 – 15 etc) • Extension- add/subtract involving double negatives/negative with a positive e.g. -3 – (-5) or -4 + (-2)	
	Time	• Dates/date intervals (e.g. know how to calculate interval from 12th of May to 6th July etc) • Be able to read 12hr and 24hr clock & change between 12hr/24hr times • Using/reading timetables • Time intervals (e.g. how long is it from 1352 to 1719)	
	Angles	• Types & Naming angles (acute, obtuse, right etc & <ADB) • Measuring/Drawing angles (using a protractor) • Calculating missing angles using angle facts (no protractor)	
	Algebra_2	• Solving/Forming basic equations (e.g. $2x + 5 = 15, \textit{solve for } x$)	
	Basic operations (Decimals & money)	• Add/Subtract decimals upto 3 decimal places • Multiply/Divide a decimal up to 3dps by single digit and in money context. • Multiply/Divide a decimal by 10,100,1000 • Extension – multiply/divide by multiples of 10,100,1000 e.g. x,÷ by 20,400 etc • Extension – multiply/divide a decimal by a decimal	
	Assessment (November Numeracy Test_**Non Calc**)	• A revision homework will be provided before this assessment. • Class moves normally take place after this assessment.	
	Fraction/Decimal/Percentage	• Link between common percentages, fractions and decimals (e.g. ¼ = 0.25 = 25%)	

	Percentages_1	• Simple Non-calc. percentages (finding 1%,10%,20%,25%,50%,75% etc) • Extension – 27% using 20%+7%	
	Co-ordinates_2	• Recap content of CO-ORDINATES 1 & extend to situations involving reflection/translation of points of objects.	
	Symmetry	• Line symmetry (complete the reflection) • Rotational symmetry (rotate image around a point)	

January - March	Data & Analysis	• Data representation – reading/drawing pictographs/bar graphs/line graphs & simple pie charts, • Extension – reading more complicated pie charts • Extension – intro to calculation methods for averages e.g. find the mean	
	Probability	• Find/interpret simple probabilities expressed as a fraction (decimal/percentage)	
	2D shapes/Area	• Language/properties associated with 2D shapes (particularly triangles/quadrilaterals) & (parallel/perpendicular/diagonal/bisect) • Labelling points/lines/angles • Perimeter/Area of square/rectangle/(triangle) and composite shapes	
	3D shapes/Volume	• Language/properties associated with 3D shapes (vertex/edge/face) • Recognize/draw/make nets+3D models of cube/cuboid/triangular prism • Volume of cube/cuboid • Liquid volume (1ml = $1cm^3$, 1L = 1000ml)	
	Percenatges_2	• Calc. find x% of y for a wider range of percentages • Extension – test score expressed as a %	
	Measurement_2	• Metric unit conversion (convert between metres,centimetres,millimetres & kilometres.	
	Multiples/Factors & Primes	• Multiples – Know what is meant by a multiple and be able to find the Lowest Common Multiple of two or more numbers • Factors – Know what is meant by a factor and be able to find the Highest Common Factor of two or more numbers • Primes (sieve of Erastothenes, Factor Trees) • Extension – Square/Triangular numbers/Powers	
	History of maths (project)	• Perspective on maths, Researching and processing information, Presentation of results. (Pupils will be able to select an area of maths/mathematician to research as part of a group, and present their findings)	

April - May	Algebra_3	• Solving equations of the form ax+b=cx+d e.g. $5x + 4 = 2x + 10$	
	Assessment (April end of year test_**Calc and Non Calc**)	• A revision homework(s) will be provided for this assessment. • All results from the year & teacher judgment will be collated to determined S2 class.	
	Patterns & Formula	• Number sequences & Linear number patterns	
	Scale drawings & Bearings	• Recap content of MEASUREMENT 1+2 in the context of using/constructing a scale drawing • Reading/drawing simple bearings	
	Remedial work	• Review performance in S1 assessments. Go back over more problematic topics, and use this to direct work.	
	Number Problems	• Puzzles and problem solving involving numerical skills/knowledge	