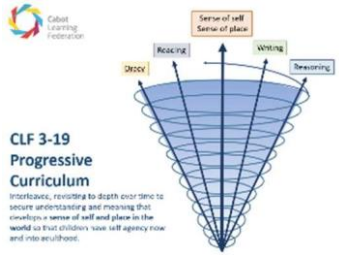
Herons' Moor Academy 1-page curriculum overview (R-6)

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Character-istics of effective learning	• Play & explore • Have a go • Active learning • Enjoy achieving goals • Creative & critical thinking • Make links	The content knowledge specified in the next row will be developed through learners demonstrating curiosity and engaging with it to: • Develop conceptual understanding so that they become fluent in the fundamental ideas of mathematics, enabling them to recall and apply knowledge accurately; • Reason mathematically by following a line of enquiry and analysing examples to conjecture relationships and generalisations and to justify & prove using mathematical language; • Solve problems by applying mathematics to routine and non-routine situations, including using mathematical habits o mind (attitudes, strategies, actions and questions) to collaborate in breaking down problems and persevering to reach solutions. Recalling and using content knowledge and skills (below) in isolation is no more mathematical than exercising the above m emotional learning skills without mathematical content and skills. Being a mathematician in the CLF entails developing inc alongside the processes and skills so that learners develop self-agency and a sense of their place as mathematicians.					 f thematical processes and ocioreasingly sophisticated content

Progress in key knowledge and skills (Y1-6 content summary from the Ready to Progress guidance)	• Cardinality including subitising & counting • Composition • Comparison • Pattern • Spatial reasoning including shape, space & measures • Personal sense of time	• Counting within 100 • Counting multiples of 2, 5 & 10 • Composition of numbers to 10 • Part-whole relationships in addition and subtraction • Reason about location of numbers to 20 in a linear number system • Comparing quantities and measures • Classify and describe 2-D and 3-D shapes by their properties	• Place value of 2-digit numbers • Reason about location of numbers to 100 in a linear number system • Fluency in addition & subtraction facts within 10 • Mentally add and subtract 2-digit numbers • Difference as an additive structure • Recognise simple multiplicative structures • Use precise mathematical language to describe 2-D and 3-D shapes and classify / sort.	• Place value of 3-digit numbers and location in linear number system; apply place value knowledge ×10 to known facts • Read scales and make links to division of 100 into 2, 4, 5 & 10 equal parts • Fluency for all addition and subtraction within 20 • Understand and manipulate the additive relationship • Recall multiplication & division facts for 2, 4, 5, 8 & 10 • Columnar addition & subtraction • Solve multiplication & division problems • Conceptual understanding of fractions and location (within 1) in linear number system • Recognise right angles, parallel & perpendicular • Draw polygons by joining marked points	• Place value & rounding of 4-digit numbers & location in linear number system; apply place value knowledge ×100 to known facts • Read scales and make links to division of 1000 into 2, 4, 5 & 10 equal parts • Recall multiplication & division facts to 12×12 and apply to solve division problems with remainders • Multiply & divide by 10 & 100 (integer quotients) and understand this as scaling • Understand the multiplicative relationship and apply commutativity & distributivity • Conceptual understanding of mixed numbers & improper fractions and location in linear number system • Draw polygons on coordinate grid (1st quadrant) • Specific properties of regular and irregular polygons including finding perimeter • Identify line symmetry in 2-D shapes	• Place value & rounding of numbers with up to 2 d.p. & location in linear number system; apply place value knowledge ×0.1 and ×0.01 to known facts • Read scales and make links to division of 1 into 2, 4, 5 & 10 equal parts • Convert between units of measure • Secure fluency in multiplication and division facts • Multiply & divide by 10 & 100 and understand this as scaling • Develop understanding of the multiplicative composition of number • Short multiplication and short division • Find non-unit fractions of quantity • Understand and find equivalent fractions • Recall fraction/decimal equivalents for 1/2, 1/4, 1/5 & 1/10 and all proper fractions with these denominators • Compare, estimate, measure and draw angles in degrees • Compare and calculate areas of rectangles	• Understand and apply place value when calculating and when reading scales, including dividing powers of 10 from 1 hundredth to 10 million into 2, 4, 5 & 10 equal parts • Place value (including rounding of numbers) up to 10 million and with decimals & their location in linear number system • Understand that two numbers can be related both additively and multiplicatively and quantify additive and multiplicative relationships • Use arithmetic properties, inverse relationships and place value to derive or complete calculations from a given calculation • Solve problems involving ratio relationships • Solve problems with two unknown values • Compare and simplify fractions using common denominators where necessary • Use reasoning to compare fractions and choose between reasoning and common denomination • Draw, compose and decompose shapes according to given properties