## Cloudside Academy MTP Year 5 Autumn 2 2019-20



Resources		Mastery:	Links to prior learning/ objectives		
Protractors, rulers, axis, graphs, multiplication squares, Cuisenaire, cubes		<ul> <li>(where to find some resources)</li> <li>Teaching for Mastery</li> <li>White Rose</li> <li>Mastery maths stickers</li> <li>Nrich (curriculum mapping)</li> </ul>	~ Identifying and naming different angles and the properties associated with each.     ~ Angle facts.     ~ Properties of rectangles- perimeter.     ~ Basic introduction to line graphs and continuous data.     ~ Multiplication facts up to 12 x 12.     ~ Factors and multiples.     ~ Using manipulatives to demonstrate mathematical concepts.     ~ Mental strategies for calculation.		
Dates Focus		Objectives	Vocabulary	Barriers to ARE (misconceptions)	
Week 1 4.11.19	Solve comparison, sum and difference problems using information presented in a line graph		Comparison, sum, difference, line graph, continuous, data, axis, intervals, scale, horizontal, vertical,	Interpreting a graph. Reading a scale, recognising the intervals and understanding what each axis represents. Recognising that the data is continuous. Understanding the terminology within the questions- difference/sum/comparison.	
Week 2 11.11.19	Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers  Establish whether a number up to 100 is prime and recall prime numbers up to 19		Prime numbers, factors, prime factors, composite numbers, multiples, multiplication facts, divisible, division facts.	Understanding of the vocabulary and mixing terminology up. Multiplication knowledge. Using known facts and making links between these and prime numbers.	
Week 3 18.11.19	Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)  Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.		Square numbers, cube numbers, squared, cubed, multiples, factors, primes, multiplication facts, divisible, division facts	Understanding of the vocabulary and mixing terminology up. Multiplication knowledge. Using known facts and making links between these and squared/cubed numbers. Application of their understanding of square and prime numbers.	

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Week 4	Multiply and divide numbers mentally	Mental strategies,	Mental strategies, using known and derived facts to calculate
25.11.19	drawing upon known facts	known facts, derived	more complex calculations.
		facts, multiplication	Multiplication knowledge.
		facts, division facts.	Holding more than one step in their head.
			Using the most efficient methods.
Week 5	Measure and calculate the perimeter of	Rectangle, rectilinear,	Children might count each edge more than once.
2.12.19	composite rectilinear shapes in centimetres	(right-angle), flat, edge,	Children might miss out some of the edges.
	and metres.	side, vertex, vertices,	Children might not identify missing lengths.
		perimeter, addition,	Children might not use the appropriate units.
		total, altogether, units,	Children might not use the appropriate units.
		meters, centimeters	Children might not identify the relationship between rectangles
			and rectilinear shapes.
Week 6	Assessment week?		
9.12.19	Assessments and use this time to focus on		
	any gaps in learning and especially key skills!		
Week 7	Calculate and compare the area of rectangles	Area, rectangles,	Children may struggle to know the properties of given shapes.
16.12.19	(including squares), and including using	standard units,	Children may not understand what the area is.
	standard units, square centimetres (cm2) and	centimetres, square,	Children may confuse area and perimeter.
	square metres (m2) and estimate the area of	metres, irregular	Children may not recognise irregular shapes.
	irregular shapes	shapes, properties,	Children may forget to use squared when writing the area.
		estimate.	Children may struggle to make an informed estimate.