Year 7- Number Operations | Term 3 | Mastery Maths

Stage	Description		
	Section A Prerequisites	**Section B** Number operations	**Section C** Application of number operations
Emerging	• Can recall their multiplication tables. • Can link their multiplication understanding to visual representations such as arrays. • Can use the idea of area to aid with both multiplication and division.	• Can use place value counters and grids to represent decimal values up to two decimal places.	• Can understand percent as part of 100. • Can represent percentages using pictures and bar modelling.
Developing	• Can add and subtract integers and decimals (linking to place value and exchange). • Can multiply using multiple representations such as arrays and repeat addition. • Can divide using multiple representations such as area, repeat subtraction and inverse multiplication. • Multiply and divide by powers of 10. • Can recall factors and multiples, linking with multiplication and division.	• Can apply the commutative law 7 + 3 = 3 + 7 • Can apply associative law e.g. 16+ 28 + 12 = (16 + 28) + 12 = 16 + (28 + 12) • Can use multiple strategies for working out addition & subtraction (e.g. 537 – 499 it's easier to do 538 – 500)	• Can identify metric units (including making some conversions). • Can calculate the perimeter of a shape. • Can find the area of rectangles, parallelograms and triangles.
Secure		• Demonstrate an understanding multiplication/division equivalence e.g. ÷18 = ÷6 ÷3 • Order of operations – link to commutative & associative & representations	• Can solve problems involving two way tables, frequency trees and bar charts. • Can solve financial problems involving cost and bank statements
Excellence		• Can multiply decimals by integers and by decimals • Can divide decimals by integers.	• Can add and subtract number in standard form. • Can find the mean from data, including more complex problems.