Year 9 Objective List – Foundation HT1

Number and Multiplicative Reasoning:

Objective	Sparx Task
Divisibility rules	M823
Identify factors using division	M823
Identify prime numbers	M322
Identify and use multiples	
Review of add and subtract with negatives	M106
Multiply with negatives	M288
Divide with negatives	M288
Solve problems with negative numbers	M106, M288
Index notation for squares and calculating with squares	M135
Index notation and writing a number as a product of prime factors	M108
Calculating square and cube roots using prime factor decomposition LCM and HCF of a set of numbers	M108
LCM and HCF using prime factor decomposition	U250
Order of operations with multiply and divide	M521
Calculations under a square root	M521
More complicated calculations involving operations on numerators and denominators	M521
Squaring negatives on a calculator	M757
Multiplying and dividing by powers of 10 using index notation	M113
Writing a ratio, simplifying a ratio including with fractions and decimals	M885
Simplifying ratios	M885
Simplifying ratios with fractions and decimals	M267
Writing a ratio as a fraction	M267
Using ratio tables	

Converting metric units	M772,
	M530, M761
Sharing a ratio in two or more parts using bar models	M525
Sharing in a ratio when given value of one part of the ratio	M525
Using ratios in scales on maps, metric to imperial conversions and double number lines	M112
Unitary methods to solve ratio and proportion problems	M478
Simple problem solving with ratio and inverse proportion	M478
Simple problem solving with direct proportion	M478
Writing a ratio in the form 1 to n	M543
Use scale factors on scale diagrams and maps	M112