## 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, <br> M530, M761 |  |
| :--- | :---: | :---: |
| Sharing a ratio in two or more parts using bar <br> models | M 525 |  |
| Sharing in a ratio when given value of one part <br> of the ratio | M 525 |  |
| Using ratios in scales on maps, metric to <br> imperial conversions and double number lines | M 112 |  |
| Unitary methods to solve ratio and proportion <br> problems | M 478 |  |
| Simple problem solving with ratio and inverse <br> proportion | M 478 |  |
| Simple problem solving with direct proportion | M 478 |  |
| Writing a ratio in the form 1 to n | M 443 |  |
| Use scale factors on scale diagrams and maps | M 112 |  |

