

**Calculating:**

| Objective  | Sparx Task |  |
|--|------------|--|
| Represent negative numbers on a number line                                      | U947       |  |
| Interpret negative values in context e.g. temperature, debt                      |            |  |
| Compare and order positive and negative numbers including inequality signs       | M527       |  |
| Understand the relationship between addition and subtraction using bar modelling |            |  |
| Understand the laws of commutativity - priority of operations with + and –       | M952       |  |
| Use the adjusting method to solve addition and subtraction problems              |            |  |
| Add and subtract using the column method   | U478       |  |
| Recall multiplication facts and associated division facts                        | M409       |  |
| Use formal method to multiply numbers by a single digit integer                  | U127       |  |
| Identify operation required to solve worded problems                             |            |  |
| Add and subtract positive and negative numbers                                   | U742       |  |
| Priority of operations with multiplication and division                          | U976       |  |
| Priority of operations with + - x and divide                                     | U976       |  |
| Priority of operations including brackets  | U976       |  |
| What is a factor; listing factors of numbers                                     | U211       |  |
| Divisibility rules for 2,3,4,5,6,8,9,10  | M823       |  |
| What is a multiple; listing multiples of numbers                                 |            |  |
| Recognise square numbers   |            |  |
| Squares and square roots of numbers and how to find on a calculator              |            |  |
| Index notation for powers and on a calculator                                    | M757       |  |

## Expressions, Functions and Formulae:

| Objective   | Sparx Task |  |
|---|------------|--|
| What is a term and what is the coefficient of the term                                    |            |  |
| Identify term, expression, formulae and equation  |            |  |
| Collect like terms by adding  | U105       |  |
| Collect like terms with subtracting (and adding)  | U105       |  |
| Multiply terms e.g $2 \times p$ and $p \times q$  | U662       |  |
| Simplify terms using repeated multiplication e.g.<br>$p^2$ $(2p)^2$ $p \times p \times p$ | U662       |  |
| Divide terms  | U662       |  |
| Multiply a bracket by a number  | U179       |  |
| Multiply a bracket by a single term   | U179       |  |
| Simplify more complicated expressions by collecting like terms e.g. $3(x+4)-2(2x-5)$      | U179       |  |
| Write expressions to represent function machines  | M428       |  |
| Write expressions from word descriptions using addition subtraction and multiplication    | M428       |  |
| Find the output of a function machine   | M428       |  |
| Substitute positive integers into simple expressions                                      | U585 U144  |  |
| Find the input given the output of a function machine                                     | M428       |  |
| Find the function given the input and the output.   | M428       |  |