## Mathematical Skills - Progression through the National Curriculum

Notes:

- Algebra

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equations | solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=*-9$ | recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems | solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. <br> solve problems, including missing number problems, involving multiplication and division, including integer scaling |  | use the properties of rectangles to deduce related facts and find missing lengths and angles | express missing number problems algebraically |
|  |  | recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 |  |  |  | find pairs of numbers that satisfy number sentences involving two unknowns |
|  | represent and use number bonds and related subtraction facts within 20 |  |  |  |  | enumerate all possibilities of combinations of two variables |
| Formulae |  |  |  | Perimeter can be expressed algebraically as $2(a+b)$ where $a$ and $b$ are the dimensions in the same unit |  | use simple formulae <br> recognise when it is possible to use formulae for area and volume of shapes |
| Sequences | sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening | compare and sequence intervals of time <br> order and arrange combinations of mathematical objects in patterns |  |  |  |  |

