WHOLE SCHOOL MATHS PROGRESION

Solve Problems

To become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

To reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

To solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

## ALGEBRA

| EQUATIONS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
|  | Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=\square-9$ <br> Copied from Addition and Subtraction | Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. <br> Copied from Addition and Subtraction | Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. <br> Copied from Addition and Subtraction |  | Use the properties of rectangles to deduce related facts and find missing lengths and angles <br> Copied from Geometry: Properties of Shapes | Express missing number problems algebraically |
|  |  |  | Solve problems, including missing number problems, involving multiplication and division, including integer scaling <br> Copied from <br> Multiplication and Division |  |  |  |
|  |  | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 <br> Copied from Addition and Subtraction |  |  |  | Find pairs of numbers that satisfy number sentences involving two unknowns |
|  | Represent and use number bonds and related subtraction facts within 20 <br> Copied from Addition and Subtraction |  |  |  |  | Enumerate all possibilities of combinations of two variables |
| FORMULAE |  |  |  |  |  |  |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
|  |  |  |  | Perimeter can be expressed algebraically as $2(a+b)$ where $a$ and $b$ are the dimensions in the same unit <br> Copied from NSG measurement |  | Use simple formulae |


|  |  |  |  |  |  | Recognise when it is possible to use formulae for area and volume of shapes <br> Copied from Measurement |
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| SEQUENCES |  |  |  |  |  |  |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
| Order and sequences familiar events | Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening Copied from Measurement | Compare and sequence intervals of time <br> Copied from Measurement |  |  |  |  |
| Uses everyday language to talk about time |  | Order and arrange combinations of mathematical objects in patterns <br> Copied from Geometry: position and direction |  |  |  | Generate and describe linear number sequences |

