## Algebra

## Pattern

Continuing an $A B$ and $A B C$ pattern
Copying an $A B$ pattern
Make their own $A B, A B B$ and $A B B C$ patterns
spotting an error in an AB pattern and an ABB pattern
Identifying the unit of repeat
Continuing a pattern that ends mid unit
Symbolising the unit structure e.g. this is a red blue pattern or using symbols to represent the pattern
Generalising structures to another context or mode - finding the rule of the pattern
Making a pattern that repeats around a circle
Making a pattern around a border with a fixed number of spaces

## EYFS

| EQUATIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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) <br> Autumn 2 <br> Spring 1 | recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. (copied from Addition and Subtraction) <br> Autumn 2 | solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (copied from Addition and Subtraction) <br> Autumn 2 <br> solve problems, including missing number problems, involving multiplication and division, including integer scaling (copied from Multiplication and Division) Autumn 4 Spring 1 |  | use the properties of rectangles to deduce related facts and find missing lengths and angles (copied from Geometry: Properties of Shapes) Summer 2 | express missing number problems algebraically Spring 3 |
|  | recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 (copied from Addition and Subtraction) <br> Autumn 2 |  |  |  | find pairs of numbers that satisfy number sentences involving two unknowns Spring 3 |
| represent and use number bonds and related subtraction facts within 20 (copied from Addition and Subtraction) <br> Autumn 2 Spring 1 |  |  |  |  | enumerate all possibilities of combinations of two variables Spring 3 |


| FORMULAE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  | Perimeter can be expressed algebraically as 2(a+b) |  | use simple formulae Spring 3 |
|  |  |  | where $a$ and $b$ are the dimensions in the same unit. (Copied from NSG measurement) <br> Autumn 3 <br> Spring 2 |  | recognise when it is possible to use formulae for area and volume of shapes (copied from Measurement) Spring 5 |
| SEQUENCES |  |  |  |  |  |
| sequence events in chronological order using language such as: before and after, next, first, today, | compare and sequence intervals of time (copied from Measurement) Summer 3 |  |  |  | generate and describe linear number sequences Spring 3 |
| yesterday, tomorrow, morning, afternoon and evening (copied from Measurement) Summer 6 | order and arrange combinations of mathematical objects in patterns (copied from Geometry: position and direction) Spring 3 Summer 1 |  |  |  |  |

