	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
New Vocabulary		*See addition and subtraction and measurement*	*See addition and subtraction, measurement and geometry: position and direction*	*See addition and subtraction*	*See measurement*	*See geometry: properties of shape*	rule expression substitute formula equation
Equations	Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and + or -	*solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9* **(copied from Addition and Subtraction)** K – understand addition and subtraction K – how to use concrete objects and pictorial representations to represent a problem K – purpose of equal sign = and how it can be used in different places in a calculation S – add and subtract accurately	*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)** K – inverse relationship between addition and subtraction S – how to use the inverse relationship between addition and subtraction to check calculations S – use concrete and pictorial representations to explain the relationship	**solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (copied from Addition and Subtraction)** K – confident knowledge of number facts and place value. K – how to calculate more complex addition and subtraction S - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction		*use the properties of rectangles to deduce related facts and find missing lengths and angles* **(copied from Geometry: Properties of Shapes)** K – properties of rectangles K – angles in a quadrilateral add up to 360º S – use the properties of rectangles to deduce related facts S -find missing lengths and angles	**express missing number problems algebraically** K – letters can represent numbers K – x can be left out of a multiplication calculation eg 3 x d = 3d S – express missing number problems algebraically **find pairs of numbers that satisfy number sentences involving two unknowns** K – how to work logically by finding appropriate starting points S – find pairs of numbers that satisfy number sentences

S – represent a problem using concrete objects and pictorial representations S- solve one-step missing number problems ***represent and use number bonds and related subtraction facts within 20* (copied from Addition and Subtraction)** K – value of numbers to 20 K- number bonds within 20 S – use concrete resources to add and subtract S – represent number bonds and related subtraction facts pictorially	between addition and subtraction S – solve missing number problems ***recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100* (copied from Addition and Subtraction)** K - numbers to 100 K – addition facts to 20 K- subtraction facts to 20 K – value of 2 digit numbers up to 100 S – recall addition facts to 20 S – recall subtraction facts to 20 S – derive facts up to 100	***solve problems, including missing number problems, involving multiplication and division, including integer scaling* (copied from Multiplication and Division)** K – how to use a bar model to show positive integer scaling and correspondence problems K - multiplication and division facts of the 2,3,4,5,8 and 10 times tables. S – apply knowledge of multiplication and division to solve problems S- use mental and written methods accurately. S- use bar model accurately to represent integer scaling problems and correspondence problems			involving two unknowns. **enumerate all possibilities of combinations of two variables** K – how to work logically to find all possibilities of combinations of two variables S – enumerate all possibilities of combinations of two variables

| Formulae | | *sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening* **(copied from Measurement)**

K – meaning of words given as examples above
K – appropriate contexts for above examples
S- sequence events in chronological order using appropriate language | *compare and sequence intervals of time* **(copied from Measurement)**

K – how time is recorded
K – 60 seconds in a minute and 60 minutes in an hour
K – 24hrs in a day
K – 7 days in a week. 14 days in a fortnight.
S – compare and sequence intervals of time.

order and arrange combinations of mathematical objects in patterns **(copied from Geometry: position and direction)**
K – the difference between a pattern and a sequence
S – order and arrange combinations of mathematical objects in patterns and sequences | | *Perimeter can be expressed algebraically as 2(a + b) where a and b are the dimensions in the same unit.*
(Copied from NSG measurement) | | **use simple formulae**

K – that formulae are a set of instructions
K – calculate accurately across all four operations
S – use simple formulae

recognise when it is possible to use formulae for area and volume of shapes **(copied from Measurement)**

generate and describe linear number sequences

K- how to find the common different of a set of numbers
S – generate and describe linear number sequences |