	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and place value	**Write correctly numbers to 10** **Count with 1:1 correspondence to 20**	**Write numbers to 50** **Write numbers to 100 in numerals** **20 in words**	**Place value: tens and ones**	**Place value: 100s tens , ones up to 1000**	**Round to the nearest 10, 100 and 1000.** **Count back into negative numbers** **Know Roman numerals to 100**	**Round numbers to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000** **Know Roman numerals to 1000 including reading years e.g. 2008**	**Round any whole number to 10 000 000 to the nearest 10, 100, 1000, 10 000, 100 000 and 1 000 000** **Calculate with negative numbers**
Addition and subtraction	**One more and one less of a given number up to (20)**	**Instant recall of number bonds to 20**	**Use column addition and subtraction tens and ones**	**Use column addition and subtraction hundreds, tens and ones**	**Use column addition and subtraction thousands, hundreds, tens and ones**	**Use column addition and subtraction for whole numbers above 4 digits**	**Know the order of operations**
Multiplication and division	**Understand vocabulary: share equally lots of groups of equal**	**Recite counting in 2 , 5 and 10**	**Instant recall of 2 5 and 10 x tables** **Count in 3s** **Multiple** **Odd and even numbers**	**Instant recall of 3, 4, 8 times tables** ***Introduce 6 times tables*** **Use column method of multiplication tens and ones** **Short division using known tables 2 digit by 1 digit**	**Instant recall of times tables to 12 x 12** **Use column method of multiplication hundreds, tens and ones** **Short division of 3 digit by 1 digit.**	**Identify multiples, factors, prime numbers (up to 100), prime factors and composite numbers.** **Instant recall of prime numbers to 19** **Use column method of short or long multiplication for 4 digits by a 1 or 2-digit number.** **Short division of 4 digit by 1-digit number**	**Use long division for 4-digit by 2- digit numbers** **Represent remainders as fractions and decimals to 2 places.** **Identify common factors, common multiples and prime numbers.**

						Multiply and divide whole numbers and decimals by 10, 100 and 1000	
Fractions	**Use language of half/ halving within practical activity**	**Recognise, name, find half and a quarter of an object – e.g. cake, fruit, pizza and of a shape** **Half** **Quarter** **Recognise, name and find half and a quarter of a quantity up 20 using concrete or pictorial**	**Write fractions ½ ¼ 1/3 2/4 and 3/4 of a length shape set of objects or quantity** **Equivalence of ½ an 2/4**	**Recognise, find and write unit and non-unit fractions of a set of objects up to 20. E.g. 1/7, 1/10, 2/7, 4/10** **Recognise equivalent fractions (denominators to 20)** **Add and subtract fractions with the same denominator within a whole.** **Know the equivalent tenths fractions (3/10) to decimals (0.3)**	**Know common equivalent fractions** **Add and subtract fractions with the same denominator beyond a whole.** **Decimals – divide a 1-digit number by 10 and 100.** **Round tenths to whole numbers**	**Convert between mixed numbers and improper fractions** **Add and subtract fractions with different denominators** **Multiply fractions and mixed numbers by whole numbers** **Know decimal equivalents of fractions** **Order decimal numbers to 3 places** **Round decimals to one place or whole numbers** **Know percentage, decimal and fraction equivalents of ½ ¼ 1/5 2/5 4/5 and fractions over multiples of 10 and 25**	**Simplify fractions** **Compare and order fractions with different denominators** **Add and subtract mixed numbers with different denominators** **Multiply fractions by fractions** **Divide fractions by a whole number** **Multiply and divide numbers by 10, 100 and 1000 up to 3 decimal places.** **Multiply 1-digit with 2 decimal places by whole numbers** **Know equivalence between percentages, decimals and fractions 1/3, 1/6 and 1/8**

Measures	**Use bigger/smaller, longer/shorter, heavier/lighter and faster/slower to describe everyday objects.**	**Know days of the week and months of the year** **Read a clock to hour and half past**	**Rapid recall of conversions between:** **Minutes – hours - days** **Read a clock to 5 minute intervals**	**Conversions between:** **Km – m – cm – mm** **Kg – g** **L – ml** **Hour – minute – seconds** **Year – month – weeks – days (including how many days in each month and leap years)** **Read an analogue clock**	**Rapid recall of conversions between:** **Km – m – cm – mm** **Kg – g** **L – ml** **Hour – minute – seconds** **Year – month – weeks – days (including how many days in each month and leap years)** **12 hour and 24 hour clock**	**Know the approximate equivalents between metric and imperial units of measure.** **Know to formulas to find an area, perimeter and volume.**	**Conversions between:** **Km – m – cm – mm** **Kg – g** **L – ml** **Up to 3 decimal places** **Convert between km and miles** **Calculate area of parallelograms and triangles**
Shape Position and direction	**Recognise common 2D shapes: rectangle, square, circle, triangle.**	**Recognise common 2D shapes: rectangle, square, circle, triangle.** **Recognise 3D shapes: cubes, cuboids, pyramid, sphere.**	**Use vocab of symmetry, edges, vertices and faces accurately to describe shapes already know and: quadrilateral, polygon, prism and cone.**	**Identify right angles** **Know parallel and perpendicular lines.**	**Trapezium, kite, parallelogram, rhombus, isosceles triangle, scalene triangle, equilateral triangle** **Identify acute and obtuse angles** **Describe positions on a coordinate grid in the first quadrant**	**Identify 3D shapes: cube, cuboid, polyhedrons, prisms, cone and pyramids from 2D representations** **Identify irregular and name regular polygons** **Use a protractor** **Identify reflex, acute and obtuse angles** **Describe the coordinates of a reflected or translated shape**	**Name the parts of a circle and know that diameter is twice the radius** **Find missing angles by calculating** **Recognise 3D shapes from nets** **Describe positions on a full coordinate grid**

Statistics			**Read pictograms, tally charts and block diagrams.**	**Read bar charts (different scales e.g. 2, 5, 10) and tables.**	**Interpret line graphs for continuous data.** **Read a wide range of scales on bar charts.**	**Interpret timetables and other tables**	**Interpret pie charts** **Calculate the mean**
Ratio and proportion							**Read and write a ratio e.g. 2:3** **Identify a scale factor** **Use unequal sharing and relative sizes**
Algebra							**Use formulae** **Describe linear sequences** **Write algebraically to express missing numbers** **Find pairs of numbers to satisfy an equation and find possibilities**