

Numbers and place value

I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.

I can count forwards and backwards in steps of powers of 10 for any given number up to 1 000 000.

I can count forwards and backwards with positive and negative whole numbers through zero.

I can interpret negative numbers in contexts such as the temperature.

I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.

I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

I can solve number problems and practical problems that involve all of the above.

Multiplication and division

I can decide whether a number up to 100 is prime and recall prime numbers up to 19.

I can multiply numbers up to 4-digits by a one- or two- digit number using a formal written method.

I can multiply and divide numbers mentally using known facts.

I can divide numbers up to 4-digits by a 1-digit number using a short division written method.

I can multiply and divide whole numbers and decimals by 10, 100 and 1000.

I can recognise and use squared and cubed numbers and the correct notation.

I can solve problems by using my knowledge of factors, multiples, squares and cubes.

I can identify multiples and factors of numbers.

I can find all factor pairs and common factors of two numbers.

I can solve problems including scaling by simple fractions and problems involving simple rates (eg km per h, £ to \$).

Addition and subtraction

I can mentally add or subtract any 2 and 3-digit numbers.

I can use rounding to check answers to calculations.

I can solve multi-step problems in context, deciding which operations to use and why.

I can add and subtract whole numbers with more than 4 digits using a range of methods.

I can add whole numbers with more than 4 digits including using formal written methods (column).

I can subtract whole numbers with more than 4 digits including using formal written methods (column).

Measures

I can convert between different units of measure (km/m m/cm cm/mm kg/g l/ml).	
I can convert metric to common imperial units such as inches, pounds and pints.	
I can measure and calculate the perimeter of composite rectilinear shapes in cm and m.	
I can calculate and compare the areas of squares and rectangles using cm^2 and m^2 and estimate the area of irregular shapes.	
I can estimate volume eg using 1 cm^3 blocks to build cuboids (including cubes) and capacity eg using water.	
I can solve problems involving converting between units of time.	
I can solve problems involving addition, subtraction, multiplication and division of units of measure using decimal notation, including scaling.	

Statistics

I can solve problems using information presented in a line graph.	
I can complete, read and interpret information in tables including timetables.	

Fractions and decimals

I can compare and order fractions whose denominators are all multiples of the same number.	
I can name equivalent fractions of a given fraction including tenths and hundredths.	
I can recognise mixed numbers and improper fractions and convert from one to the other.	
I can write mathematical statements >1 as a mixed number e.g. $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$.	
I can add and subtract fractions with the same denominator and related fractions.	
I can multiply proper fractions and mixed numbers by whole numbers up to 10, supported by materials and diagrams.	
I can read and write decimal numbers as fractions eg $0.7 = 7/10$.	
I can read, write, order and compare numbers with up to 3 decimal places .	
I can round decimals with two decimal places to the nearest whole number and to one decimal place.	
I can solve problems involving number up to three decimal places.	
I can explain the meaning of % and write percentages as a fraction and as a decimal.	
I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{2}{5}$ $\frac{4}{5}$ and those with a denominator of a multiple of 10 and 25.	

Geometry

I can identify 3-D shapes, including cubes and cuboids, from 2-D representations.	
I can estimate and compare acute, obtuse and reflex angles.	
I can measure and draw a given angle and write its size in degrees.	
I can use the properties of rectangles to deduce related facts and find missing lengths and angles.	
I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	
I can identify, describe and represent the position of a shape following a reflection.	
I can identify, describe and represent the position of a shape following a translation.	
I can identify angles at a point and one whole turn (total 360°), angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) and other multiples of 90°	

