Year 6Maths Curriculum 2014 Name:			
Numbers and the number system			
read, write, order and compare numbers up to 10 000 000 and determine the value of each digit			
round any whole number to a required degree of accuracy KPI			
use negative numbers in context, and calculate intervals across zeroKPI			
solv e number and practical problems that involve all of the above			
Addition, subtraction, multiplication and division			
multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication KPI perform mental calculations, including with mixed operations and large numbers			
divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context KPI			
divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context			
identify common factors, common multiples and prime numbers			
use their knowledge of the order of operations to carry out calculations involving the four operations			
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and whyKPI			
solve problems involving addition, subtraction, multiplication and division			
use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. KPI			
Fractions and decimals			
use common factors to simplify fractions; use common multiples to express fractions in the same denomination			
compare and order fractions, including fractions > 1			
add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions			
multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = 1/8]			
divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]			
associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]			
identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places			
multiply one-digit numbers with up to two decimal places by whole numbers			
use written division methods in cases where the answer has up to two decimal places KPI			
solve problems which require answers to be rounded to specified degrees of accuracy KPI			
recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. KPI			
Ratio and Proportion			
solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts			
solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison KPI			
solve problems involving similar shapes where the scale factor is known or can be found			
solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.KPI			
Algebra			
use simple formulae KPI			
generate and describe linear number sequences			
express missing number problems algebraically			
find pairs of numbers that satisfy an equation with two unknowns			
enumerate possibilities of combinations of two variables.			
Measurement			
solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate			
use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places KPI			
convert between miles and kilometres			
recognise that shapes with the same areas can have different perimeters and vice versa			
recognise when it is possible to use formulae for area and volume of shapes			
calculate the area of parallelograms and triangles			
calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other unit[for example, mm3 and km3].			
Geometry			
draw 2-D shapes using given dimensions and angles			
recognise, describe and build simple 3-D shapes, including making nets			
compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons KPI			
illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius			
recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles			
describe positions on the full coordinate grid (all four quadrants)			
draw and translate simple shapes on the coordinate plane, and reflect them in the axesKPI			
Statistics			
interpret and construct pie charts and line graphs and use these to solve problems KPI			
calculate and interpret the mean as an average.KPI			