YEAR 6

END OF YEAR EXPECTATIONS FOR MATHEMATICS

NUMBER AND PLACE VALUE
I can…

read, write and compare numbers up to 10, 000, 000
9,903, 456 > 9,045, 345

Use negative numbers in context, and calculate intervals across zero

Round any whole number to a required degree of accuracy
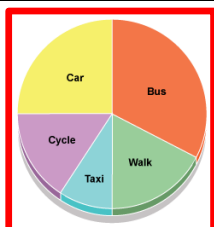
ADDITION AND SUBTRACTION
I can…

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

STATISTICS
I can…

Interpret and construct pie charts and line graphs and use these to solve problems

Calculate and interpret the mean as an average
26+24+27+23 = 100
100 ÷ 4 = 25

ALGEBRA
I can…

Use simple formulae
$a(b + c) = ab + ac$

Find pairs of numbers that satisfy an equation with two unknowns

Generate and describe linear number sequences

MULTIPLICATION AND DIVISION
I can…

Identify common factors, common multiples and prime numbers

Divide numbers up to 4 digits by a two digit number using the formal written method of short division with remainders
5823 ÷ 23 =

Divide numbers up to 4 digits by a two digit number using the formal written method of long division with remainders
3 r5
$6\sqrt{23}$

recall all my tables to 12 x 12

multiply up to a 4 digit number by two digits using the efficient written method of long multiplication
  4723
x   21
  4723
 94460
 99183

Use their knowledge of the order of operations to carry out calculations involving the four operations + - x ÷
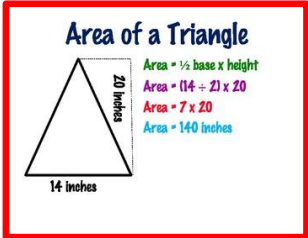
RATIO AND PROPORTION
I can…

Solve problems involving the relative sizes of two quantities where missing values can be found
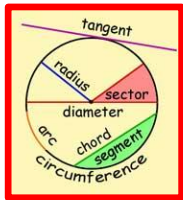
Solve problems involving the calculation of percentages

Solve problems involving similar shapes where the scale factor is known or can be found

FRACTIONS, DECIMALS AN PERCENTAGES
I can…

compare and order fractions including fractions >1
Add and subtract fractions with different denominators and mixed numbers $^1/_3 + 3^2/_5 = 3^{11}/_{15}$
Associate a fraction with division and calculate fraction equivalents 3/8 = 3÷8 = 0.375
Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
Multiply and divide proper fraction, writing the answer in its simplest form $\frac{1}{4} \times \frac{1}{2} = ^1/_8$ $\frac{1}{4} \div 3 = ^1/_{12}$
Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Websites to help

http://www.topmarks.co.uk/

https://uk.ixl.com/math/

http://www.bbc.co.uk/bitesize/ks2/maths/

http://resources.woodlands-junior.kent.sch.uk/maths/

http://www.crickweb.co.uk/ks2numeracy.html

MEASUREMENT
I can…

convert between miles and kilometres 1m = 1.6km
measure and calculate the area and perimeter of shapes
calculate the area of parallelograms and triangles
Estimate and compare volume and capacity of cubes and cuboids using standard units including cubic centimetres (cm^3)
Use, read, write and convert between standard units, converting measurements of length, mass, volume and time , using decimal notation to three decimal places

GEOMETRY
I can…

Recognise, describe and build simple 3D shapes, including making nets
Illustrate and name parts of circles, including radius, diameter and circumference
Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
Draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Describe positions on the full coordinate grid (all four quadrants)