

Pupils working at the ***expected standard*** in Y6 demonstrate varied fluency and reasoning skills and can:

NUMBER & PLACE VALUE

read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.

use negative numbers in context and calculate intervals across zero.

round any whole number and decimal to the required degree of accuracy.

bridge through boundaries of tens, hundreds and thousands when counting in given steps.

mentally solve number and practical problems using the above skills.

FOUR OPERATIONS

calculate and recall cubed numbers and write them using the notation 3 .

identify common factors, common multiples and prime numbers.

use formal long multiplication to solve questions including 5-digit by 2-digit and decimal numbers involving ones and 2d.p. by 1-digit.

use formal long division to solve questions including 4-digit by 2-digit; interpret remainders as whole number remainders, fractions, or decimals (up to 2d.p), as appropriate for the context.

use knowledge of the order of operations (BIDMAS) to carry out calculations involving the four operations.

perform mental calculations, including with mixed operations and large numbers.

solve multistep problems using all four operations in context.

FRACTIONS, DECIMALS & PERCENTAGES

compare and order fractions, including mixed numbers, with denominators which have less common multiples.

add and subtract fractions with different denominators and mixed numbers, providing the answer in its simplest form.

multiply two fractions.

divide a proper fraction by a whole number and vice versa.

provide all answers to all fraction calculations in their simplest form.

calculate a percentage of an amount and solve problems using percentages for comparison.

recall equivalent common fractions, decimals and percentages (e.g. $1/5 = 0.2 = 20\%$)

calculate fraction, decimal and percentage equivalents using the most efficient method.

RATIO & PROPORTION

solve problems involving the relative sizes of two quantities where missing values can be found by using multiplication and division facts.

solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

ALGEBRA

use simple formulae.

generate and describe linear number sequences.

express missing number problems algebraically.

find pairs of numbers that satisfy an equation with two unknowns.

generate possibilities of combinations of 2 variables..

Pupils working at ***greater depth*** within the expected standard in Y6 can:

master all Y6 expected standard objectives.

consistently and confidently reason and problem solve to answer complex and abstract questions (that span a range of strands and contexts) through applying skills such as visualising, working systematically, justifying, conjecturing and thinking logically.