

Pupils working at the ***expected standard*** in Y5 demonstrate varied fluency and reasoning skills and can:

NUMBER & PLACE VALUE

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

round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 or 100000.

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

count up and down in thousandths; recognise that thousandths arise from dividing an object into 1000 equal parts and in dividing numbers or quantities by 1000.

round numbers with 2 decimal places to the nearest whole number and 1 decimal place.

read, write, order and compare numbers with up to 3 decimal places.

count forward and backwards through zero in ones and other given steps.

mentally solve number and practical problems using the above skills.

FOUR OPERATIONS

use formal column addition and subtraction to solve questions involving numbers up to 6-digits.

add and subtract numbers mentally with large numbers.

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

identify multiples and factors including finding all factor pairs of a number and common factors of two numbers.

multiply and divide numbers mentally drawing upon known facts.

use formal short multiplication to solve questions including up to 5-digit by 1-digit.

use formal long multiplication to solve questions involving up to 4-digit by 2-digit.

use formal short division to solve questions including 6-digit by 1-digit; interpret remainders as whole number remainders or fractions, as appropriate for the context.

multiply and divide whole numbers and those involving decimals (to 3d.p.) by 10, 100 and 1000.

calculate and recall squared numbers and write them using the notation 2 .

demonstrate efficiency in calculation through drawing upon known number facts, pattern spotting and identifying relationships (e.g for $4900 \div 70$, pupil can draw upon $49 \div 7$).

FRACTIONS, DECIMALS & PERCENTAGES

convert mixed numbers to improper fractions and vice versa.

add and subtract mixed numbers with the same denominator, giving the answer in its simplest form.

add and subtract fractions with different denominators (up to hundredths).

compare and order fractions with denominators which have less common multiples.

multiply fractions, including mixed numbers, by a whole number.

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

calculate and compare fractions of amounts.

recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred; write percentages as a fraction with denominator 100, and as a decimal.

convert mixed numbers to improper fractions and vice versa.

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 fractions with a denominator that is a multiple of 10 or 25.

Pupils working at ***greater depth*** within the expected standard in Y5 can:

master all Y5 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.