Mathematics Enhancement Programme

TEACHING SUPPORT: Year 5

OVERVIEW

As with Year 4, many concepts are extended and new ones introduced throughout Year 5. Some revision of Year 4 work is covered in the first few months; this is important as students need to be confident with this before moving on to new topics.

At the start of Year 5, we expect students to be able to

- *use numbers up to 10 000 in calculations (addition, subtraction, multiplication and division) with confidence*
- *have instant recall of multiplication tables up to 10 × 10 and number bonds up to 10*
- *understand equivalent fractions and be able to add and subtract fractions*
- *understand the decimal equivalent of fractions with tenths and hundredths and be able to convert simple fractions to/from decimals*
- *add and subtract decimal numbers, using the column notation*
- *understand and solve simple equations*
- *express natural numbers in terms of their prime factors*
- *round numbers to the nearest 10, 100, 1000*
- *use Venn diagrams to classify a set of numbers*
- *extend units of measurement to include mm*
- *understand and use negative numbers on a number line and in context, e.g. thermometer, sea level*
- *order a set of numbers, including negative numbers*
- *understand simple calculations, additions and subtractions, with negative numbers*
- *find the perimeter, area and volume of simple shapes with lengths given as natural numbers, fractions or decimals*
- *understand the concepts of symmetry and congruence of simple 2D shapes and identify lines of symmetry or use mirror lines*
- *recognise and understand convex and concave shapes*
- *use positive 2D coordinates to define shapes*
- *use tally charts, pie charts, bar charts and pictograms to illustrate data*
- *understand what is meant by the median of a set of numbers*
- *find simple probabilities.*