Arno Vale Junior School: Year 3 mathematicians

Number, place value, approximation and estimation/rounding

- Count from 0 in multiples of 4, 8, 50 and 100.
- Compare and order numbers up to 1,000.
- Read and write numbers to 1,000 in numerals and words.
- Find 10 or 100 more or less than a given number.
- Recognise the place value of each digit in a 3-digit number.
- Identify, represent and estimate numbers using different representations.
- Solve number problems and practical problems using above.

Calculations

- Add and subtract mentally, including:
- A 3-digit number and ones
- A 3-digit number and tens
- A 3-digit number and hundreds
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
- Estimate the answer to a calculation and use inverse operation to check answers.
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
- Recall and use multiplication and division facts for the 3, 4 and 8x tables.
- Write and calculate mathematical statements for multiplication and division using the multiplication tables, including for 2-digit numbers, using mental and progressing to formal written methods.
- Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions, decimals and percentages

- Count up and down in tenths.
- Recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10.
- Recognise and can find and write factions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
- Compare and order unit fractions and factions with the same denominators.
- Add and subtract factions with the same denominator within one whole.
- Solve problems involving the above.

Measurement

- Compare lengths using m, cm &mm.
- Compare mass using kg & g.
- Compare volume/capacity using l & ml.
- Measure lengths using m, cm & mm.
- Measure mass using kg & g.
- Measure volume/capacity using l & ml.
- Add and subtract lengths using m, cm & mm.
- Add and subtract mass using kg & g.
- Add and subtract volume/capacity using l & ml.
- Tell and write the time from an analogue clock (12 hour clock).
- Tell and write the time from an analogue clock (24 hour clock).
- Tell and write the time from an analogue clock (Roman numerals).
- Estimate and read time with increasing accuracy to the nearest minute.
- Record and compare time in terms of seconds, minutes and hours.
- Use the following vocabulary: o'clock, am, pm, morning, afternoon, noon & midnight.
- Know the number of seconds in a minute.
- Know the number of days in each month, year and leap year.
- Compare the duration of events.
- Measure the perimeter of simple 2D shapes.
- Add and subtract amounts of money to give change, using both £ and p in a practical context.

Geometry – properties of shapes

- Identify horizontal, vertical lines and pairs of perpendicular and parallel lines.
- Draw 2D shapes.
- Make 3D shapes using modelling materials.
- Recognise 3D shapes in different orientations and describe them.
- Recognise that angles are a property of shape or a description of a turn.
- Identify right angles.
- Recognise that two right angles make a half-turn & three make a three quarter turn.
- Identify whether angles are greater than or less than a right angle.

Statistics

- Interpret and present data using bar charts, pictograms and tables.
- Solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables.