



Year 4 End of Year Maths Expectations

Working at the Expected Standard (EXP):

Pupil(s) are confidently and independently able to apply their knowledge:

Number & Place Value


- Count in multiples of 6, 7, 9, 25 and 1000.
- Find 1000 more or less than a given number.
- Count backwards through zero to include negative numbers.
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
- Order and compare numbers beyond 1000.
- Identify, represent and estimate numbers using different representations, e.g. using objects, diagrams, written number.
- Round any number to the nearest 10, 100 or 1000.
- Solve number and practical problems that involve all of the above, and with increasingly large positive numbers.
- Read Roman numerals up to 100 (I to C) and know that, over time, the numeral system changed to include the concept of zero and place value.

Addition & Subtraction

- Add and subtract numbers with up to 4 digits, using the formal written methods of columnar addition and subtraction where appropriate.
- Estimate and use inverse operations to check answers to a calculation.
- Solve addition and subtraction two-step problems in context, deciding which operations and methods to use and why.

Multiplication & Division


- Recall multiplication and division facts for multiplication tables up to 12 x 12.
- Use place value, and known and derived facts, to multiply and divide mentally, including: multiplying by 0 and 1, dividing by 1, multiplying together three numbers.

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- Recognise and use factor pairs and commutativity in mental calculations, e.g. multiplication is the inverse operation of division: $7 \times 4 = 28$ so $28 \div 4 = 7$.
 - Multiply two-digit and three-digit numbers by a one-digit number using a formal written layout.
 - Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit numbers, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Fractions

- Recognise and show, using diagrams, families of common equivalent fractions.
- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- Add and subtract fractions with the same denominator.
- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Recognise and write decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.
- Round decimals with one decimal place to the nearest whole number.
- Compare numbers with the same number of decimal places (up to two decimal places).
- Solve simple measure and money problems involving fractions, and decimals with up to two decimal places.

Properties of Shape

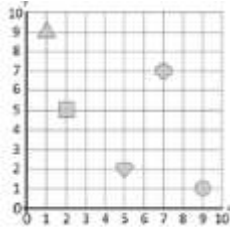
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
 - Identify acute and obtuse angles, and compare and order angles up to two right angles by size.
 - Identify lines of symmetry in 2-D shapes presented in different orientations.
 - Complete a simple symmetric figure with respect to a specific line of symmetry.
 - Begin to recognise where angles are greater than two right angles. Know the term
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straight angle, referring to two right angles together.

- Begin exploring line symmetry with two lines of symmetry.

Position & Direction

- Describe positions on a 2-D grid as coordinates in the first quadrant, e.g.



- Describe movements between positions as translations of a given unit to the left/right and up/down.
- Plot specified points and draw sides to complete a given polygon.

Measurement

- Convert between different units of measure e.g. kilometre to metre, hour to minute.
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- Find the area of rectilinear shapes by counting squares.
- Estimate, compare and calculate different measures, including money in pounds and pence.
- Read, write and convert time between analogue and digital 12- and 24-hour clocks.
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Statistics

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.