Mathematics

Key Learning Indicators of Performance: Year 4



Number – fractions, decimals and percentages

- ► Understand that a fraction is one whole number divided by another (e.g. $\frac{3}{4}$ can be interpreted as $3 \div 4$).
- Recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators.
- Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Count on and back in steps of unit fractions.
- ► Compare and order unit fractions and fractions with the same denominators (including on a number line).
- Recognise and show, using diagrams, families of common equivalent fractions.
- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.
- Add and subtract fractions with the same denominator (using diagrams).
- 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.
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Geometry – properties of shapes

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- 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.
- Continue to identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.

Geometry – position and direction

- Describe positions on a 2-D grid as coordinates in the first quadrant.
- Plot specified points and draw sides to complete a given polygon.
- ▶ Describe movements between positions as translations of a given unit to the left/right and up/down.

Measurement

- Estimate, compare and calculate different measures, including money in pounds and pence.
- Order temperatures including those below 0°C.
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- ▶ Know area is a measure of surface within a given boundary.
- Find the area of rectilinear shapes by counting squares.
- Convert between different units of measure [e.g. kilometre to metre; hour to minute].
- Read, write and convert time between analogue and digital 12and 24-hour clocks.
- Write amounts of money using decimal notation.
- ▶ Recognise that one hundred 1p coins equal £1 and that each coin is $\frac{1}{100}$ of £1.
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days and problems involving money and measures.

Statistics

- Use a variety of sorting diagrams to compare and classify numbers and geometric shapes based on their properties and sizes.
- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

© Lancashire County Council (2015)