Maths Progression

Measurement

Year 4

- Convert between different units of measure [for example, kilometre to metre; hour to minute]
- estimate, compare and calculate different measures
- 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
- measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- find the area of rectilinear shapes by counting squares

Year 6

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 d.p.
- convert between miles and kilometres
- use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units

Year 3

- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events [for example to calculate the time taken by particular events or tasks]
- measure the perimeter of simple 2-D shapes

EYFS

- Make comparisons between objects relating to size, length, weight and capacity.
- Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then…'
- Compare length, weight and capacity.
- In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items
- Recalls a sequence of events in everyday life and stories.
- Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy
- Becomes familiar with measuring tools in everyday experiences and play
- Is increasingly able to order and sequence events using everyday language related to time
- Beginning to experience measuring time with timers and calendars

Year 5

- convert between different units of metric measure
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling
- use all four operations to solve problems involving measure [for example, money]
- solve problems involving converting between units of time
- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes
- estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]

Year 1

- Compare, describe and solve practical problems for: lengths and heights, mass/weight, capacity and volume and time
- Measure and begin to record the following: lengths and heights, mass/weight, capacity and volume and time (hours, minutes, seconds)
- recognise and know the value of different denominations of coins and notes
- Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- Recognise and use language relating to dates, including days of the week, weeks, months and years
- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times

Year 2

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using >, < and =
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day