Progression in Measurement

	Comparing and Estimating	Measuring and Calculating
R	• recognise attributes (e.g.) a stick in long, an adult is tall. • compare amounts of continuous quantities.(e.g.) find something that is longer/ shorter than a given reference point. • show an awareness of comparisons in estimating and predicting • compare indirectly • use units to compare items.	• recognise the relationship between the size and number of units.
Y1	• compare, describe and solve practical problems for: **lengths and heights** long/short, longer/shorter, tall/short, double/half] **mass/weight** heavy/light, heavier than, lighter than **capacity and volume** full/empty, more than, less than, half, half full, quarter **time** quicker, slower, earlier, later • sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	• measure and begin to record the following: lengths and heights, mass/weight, capacity and volume time (hours, minutes, seconds) • recognise and know the value of different denominations of coins and notes
Y2	• compare and order lengths, mass, volume/capacity and record the results using >, < and = • compare and sequence intervals of time	• 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 • 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 chang
Y3	• compare durations of events, for example to calculate the time taken by particular events or task • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Telling the Time)	• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • measure the perimeter of simple 2-D shapes • add and subtract amounts of money to give change, using both £ and p in practical contexts

Y4	• estimate, compare and calculate different measures, including money in pounds and pence (also included in measuring)	• estimate, compare and calculate different measures, including money in pounds and pence (See Comparing) • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • add and subtract amounts of money to give change, using both £ and p in practical contexts (Consolidation from Year 3) • find the area of rectilinear shapes by counting squares
Y5	• calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes (also included in measuring) • estimate volume (e.g. using 1 cm3 blocks to build cubes and cuboids) and capacity (e.g. using water)	• use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. • measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes • recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) (copied from Multiplication and Division)
Y6	• calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm3) and cubic metres (m3), and extending to other units such as mm3 and km3 .	• solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (See Converting) • recognise that shapes with the same areas can have different perimeters and vice versa • 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 e.g.mm3 and km3 • recognise when it is possible to use formulae for area and volume of shapes

	Telling the time	Converting
R	• use time to sequence events. • experience specific time durations.	
Y1	• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times • recognise and use language relating to dates, including days of the week, weeks, months and years	
Y2	• 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. (appears also in Converting)	• know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)
Y3	• tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clock • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (See Comparing and Estimating)	• know the number of seconds in a minute and the number of days in each month, year and leap year
Y4	• read, write and convert time between analogue and digital 12 and 24-hour clocks (See Converting) • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (See Comparing and Estimating) (Consolidation from Year 3) • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (See Converting	• convert between different units of measure (e.g. kilometre to metre; hour to minute. • read, write and convert time between analogue and digital 12 and 24-hour clocks (See Telling the Time) • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (See Telling the Time)
Y5	• read, write and convert time between analogue and digital 12 and 24-hour clocks (See Converting) (Consolidation from Year 3) • solve problems involving converting between units of time	• convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • solve problems involving converting between units of time • understand and use equivalences between metric units and common imperial units such as inches, pounds and pints

Y6		• 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 three decimal places • solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (See Measuring and Calculating) • convert between miles and kilometres.