## Measurement

| COMPARING AND ESTIMATING |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| I know how to solve practical problems for: <br> * lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] mass/weight [e.g. heavy/light, heavier than, lighter than] <br> * capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] <br> * time [e.g. quicker, slower, earlier, later] | I know how to compare and order lengths, mass, volume/capacity and record the results using $>$, < and = |  | I know how to estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring) | I know how to calculate and compare the area of squares and rectangles including using standard units, square centimetres <br> $\left(\mathrm{cm}_{2}\right)$ and square metres <br> ( $m$ ) and estimate the area of irregular shapes (also included in measuring) <br> estimate volume (e.g. <br> using 1 cm blocks to build cubes and cuboids) and capacity (e.g. using water) | I know how to calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre 3 cubed (cm ) and cubic metres ( $m$ ), and extending to other 3 units such as mm and km . |
| I know how to sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] | I know how to compare and sequence intervals of time | I know how to compare durations of events, for example to calculate the time taken by particular events or tasks |  |  |  |
|  |  | I know how to 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) |  |  |  |

## Measurement

| MEASURING and CALCULATING |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| I know how to measure and begin to record the following: <br> * lengths and heights <br> * mass/weight <br> * capacity and volume <br> * time (hours, minutes, seconds) | I know the appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); temperature $\left({ }^{\circ} \mathrm{C}\right)$; capacity (litres $/ \mathrm{ml}$ ) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels | I know how to measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); volume/capacity ( $1 / \mathrm{ml}$ ) | I know how to estimate, compare and calculate different measures, including money in pounds and pence (appears also in Comparing) | I know how to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling and using all four operations to | I know how to solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Converting) |
|  |  | I know how to measure the perimeter of simple 2-D shapes | I know how to measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres | I know how to measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres | I know that shapes with the same areas can have different perimeters and vice versa |

## Measurement



## Measurement

TELLING THE TIME

| Year 1 | Year 2 | Year 3 | Year 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| I know how to tell the <br> time to the hour and half <br> past the hour and draw <br> the hands on a clock face <br> to show these times. | I know how to tell and <br> write the time to five <br> minutes, including quarter <br> past/to the hour and draw <br> the hands on a clock face <br> to show these times. | I know how to tell and <br> write the time from an <br> analogue clock, including <br> using Roman numerals <br> from I to XII, and 12-hour <br> and 24-hour clocks | I know how to read, write <br> and convert time between <br> analogue and digital 12 <br> and 24-hour clocks <br> (appears also in Converting) | Year |
| I know how the language <br> relating to dates, including <br> days of the week, weeks, <br> months and years | I know the number of <br> minutes in an hour and <br> the number of hours in a <br> day. <br> (appears also in Converting) | I know how to estimate <br> and read <br> time with increasing <br> accuracy to the nearest <br> minute; record and <br> compare time in terms of <br> seconds, minutes, hours <br> and oclock; use <br> vocabulary such as <br> am./p.m., morning, <br> afternoon, noon and <br> midnight <br> (appears also in Comparing <br> and Estimating) |  |  |


| CONVERTING |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  | I know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time) | I know the number of seconds in a minute and the number of days in each month, year and leap year | I know how to convert between different units of measure (e.g. kilometre to metre; hour to minute) | I know how to convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) | I know how to 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 |
|  |  |  | I know how to read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting) | I know how to solve problems involving converting between units of time | I know how to solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Measuring and Calculating) |
|  |  |  | I know how to solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Telling the Time) | I know how to use equivalences between metric units and common imperial units such as inches, pounds and pints | I know how to convert between miles and kilometres |

