**Content domain – measurement**

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| **Strand** | **National Curriculum reference Year 1** | **National Curriculum reference Year 2** | **National Curriculum reference Year 3** | **National Curriculum reference Year 4** | **National Curriculum reference Year 5** | **National Curriculum reference Year 6** |
| **M1**Compare, describe and order measures | **1M1** Compare, describe and solve practical problems for:* lengths and heights [e.g.: long/short, longer/ shorter, tall/short, double/half ]
* mass/weight [e.g.: heavy/light, heavier than, lighter than]
* capacity and volume [e.g.: full/empty, more than, less than, half, half full, quarter]
* time [e.g.: quicker, slower, earlier, later]
 | **2M1** Compare and order lengths, mass, volume/ capacity and record the results using >, < and = | **3M1a** Compare lengths(m/cm/mm) | **4M1** Compare different measures, including money in pounds and pence |  |  |
|  |  | **3M1b** Compare mass (kg/g) |  |  |  |
|  |  | **3M1c** Compare volume / capacity (l/ml) |  |  |  |
| **M2**Estimate, measure and read scales | **1M2** Measure and begin to record the following:* lengths and heights
* mass/weight
* capacity and volume
* time (hours, minutes, seconds)
 | **2M2** 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 | **3M2a** Measure lengths (m/cm/mm) | **4M2** Estimate different measures, including money in pounds and pence |  |  |
|  |  | **3M2b** Measure mass (kg/g) |  |  |  |
|  |  | **3M2c** Measure volume / capacity (l/ml) |  |  |  |
| **M3**Money | **1M3** Recognise and know the value of different denominations of coins and notes | **2M3a** Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value |  |  |  |  |
|  | **2M3b** Find different combinations of coins that equal the same amounts of money |  |  |  |  |
| **M4**Telling time, ordering time, duration and units of time | **1M4a** Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | **2M4a** 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 | **3M4a** Tell and write the time from an analogue clock; 12-hour clocks | **4M4a** Read, write and convert time between analogue and digital 12-hour clocks |  |  |
| **1M4b** Sequence events in chronological order using language [e.g.: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] | **2M4b**Compare and sequence intervals of time | **3M4b** Tell and write the time from an analogue clock; 24-hour clocks | **4M4b** Read, write and convert time between analogue and digital 24-hour clocks |  |  |
| **1M4c** Recognise and use language relating to dates, including days of the week, weeks, months and years | **2M4c** Know the number of minutes in an hour and the number of hours in a day | 3M4c Tell and write the timefrom an analogue clock,including using Romannumerals from I to XII | **4M4c** Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days | **5M4** Solve problems involving converting between units of time |  |
|  |  | **3M4d** 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 |  |  |  |
|  |  | **3M4e** Know the number of seconds in a minute and the number of days in each month, year and leap year |  |  |  |
|  |  | **3M4f** Compare durations of events, [e.g.: to calculate the time taken by particular events or tasks] |  |  |  |
| **M5**Convert between metric units [KS2] |  |  |  | **4M5** Convert between different units of measurement [e.g.: kilometre to metre; hour to minute] | **5M5** Convert between different units of metric measure [e.g.: kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] | **6M5** 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 of up to three decimal places |
| **M6**Convert metric/imperial [KS2] |  |  |  |  | **5M6** Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints | **6M6** Convert between miles and kilometres |
| **M7**Perimeter, area [KS2] |  |  | **3M7** Measure the perimeter of simple 2–D shapes | **4M7a** Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres | **5M7a** Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres | **6M7a** Recognise that shapes with the same areas can have different perimeters and vice versa |
|  |  |  | **4M7b** Find the area of rectilinear shapes by counting squares | **5M7b** Calculate and comparethe area of rectangles(including squares), andincluding using standardunits, square centimetres(cm²) and square metres (m²) and estimate thearea of irregular shapes | **6M7b** Calculate the area of parallelograms and triangles |
|  |  |  |  |  | **6M7c** Recognise when it is possible to use the formulae for the area of shapes |
| **M8**Volume [KS2] |  |  |  |  | **5M8** Estimate volume [e.g.: using 1cm3 blocks to build cuboids (including cubes)] and capacity [e.g.: using water] | **6M8a** 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 [e.g.: mm³ and km³] |
|  |  |  |  |  | **6M8b** Recognise when it is possible to use the formulae for the volume of shapes |
| **M9**Solve problems (a: money; b: length; c: mass / weight; d: capacity / volume) |  | **2M9** Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | **3M9a** Add and subtract amounts of money to give change, using both £ and p in practical contexts | **4M9** Calculate different measures, including money in pounds and pence | **5M9a** Use all four operations to solve problems involving measure [money] using decimal notation, including scaling | **6M9** Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate |
|  |  | **3M9b** Add and subtract lengths (m/cm/mm) |  | **5M9b** Use all four operations to solve problems involving measure [e.g.: length] using decimal notation, including scaling |  |
|  |  | **3M9c** Add and subtract mass (kg/g) |  | **5M9c** Use all four operations to solve problems involving measure [e.g.: mass] using decimal notation, including scaling |  |
|  |  | **3M9d** Add and subtract volume / capacity (l/ml) |  | **5M9d** Use all four operations to solve problems involving measure [e.g.: volume] using decimal notation, including scaling |  |