## Town End Junior School

## National Curriculum 2014 and Ready to Progress Criteria

## Strand: Measures

Objectives in black are National Curriculum statutory requirements; objectives in blue are non-statutory ready to progress criteria.

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| - Compare, describe and solve practical problems for: <br> - lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) <br> - mass or weight (e.g. heavy/light, heavier than, lighter than) <br> - capacity/volume (full/ empty, more than, less than, quarter) <br> - time (quicker, slower, earlier, later). <br> - Measure and begin to record the following: lengths and heights; mass/weight; capacity \& volume; time (hours, minutes, seconds). <br> - Recognise and know the value of different denominations of coins and notes. <br> - Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. <br> - Recognise and use language relating to dates, including days of the week, weeks, months and years. <br> - Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. | - Choose and use appropriate standard units to estimate and measure: <br> - length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); <br> - mass (kg/g); <br> - temperature $\left({ }^{\circ} \mathrm{C}\right)$; <br> - capacity (litres $/ \mathrm{ml}$ ) to the nearest appropriate unit... using rulers, scales, thermometers and measuring vessels. <br> - Compare and order lengths, mass, volume / capacity and record the results using >, < and <br> - Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. <br> - Find different combinations of coins that equal the same amounts of money. <br> - Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. <br> - Compare and sequence intervals of time. <br> - 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. | - Measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass (kg/g); volume/capacity ( $/ \mathrm{ml}$ ). <br> - Measure the perimeter of simple 2-D shapes. <br> - Add and subtract amounts of money to give change, using both $£$ and $p$ in practical contexts. <br> - Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12 -hour and 24 - hour clocks. <br> - 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. <br> - Know the number of seconds in a minute and the number of days in each month, year and leap year. <br> - Compare durations of events, for example to calculate the time taken by particular events or tasks. | - Convert between different units of measure (e.g. kilometre to metre; hour to minute). <br> - Measure and calculate the perimeter of a rectilinear figure (including squares) centimetres and metres. <br> - Find the area of rectilinear shapes by counting squares. <br> - Estimate, compare and calculate different measures, including money in pounds and pence. <br> - Read, write and convert time between analogue and digital 12 and 24-hour clocks. <br> - Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. | - Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). <br> - Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints. <br> - Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. <br> - Calculate and compare the area of squares and rectangles including using standard units, square centimetres ( $\mathrm{cm}^{2}$ ) \& square metres ( $\mathrm{m}^{2}$ ) and estimate the area of irregular shapes. <br> 5G-2 Compare areas and calculate the area of rectangles (including squares) using standard units. <br> - Estimate volume (e.g. using 1 cm 3 blocks to build cubes and cuboids) and capacity (e.g. using water). <br> - Solve problems involving converting between units of time. <br> - Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. | - Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three places where appropriate <br> - 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. <br> - Convert between miles and kilometres. <br> - Recognise that shapes with the same areas can have different perimeters and vice versa. <br> - Recognise when it is possible to use formulae for area and volume of shapes. <br> - Calculate the area of parallelograms and triangles. Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed ( $\mathrm{cm}^{3}$ ) and cubic metres $\left(\mathrm{m}^{3}\right)$, and extending to other units such as $\mathrm{mm}^{3}$ and $\mathrm{km}^{3}$. |

