## Year 5 - Measurement Converting units of measure

## National Curriculum Aims

$>$ 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
$>$ Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
> Estimate volume and capacity
$>$ solve problems involving converting between units of time
> Use all four operations to solve problems involving measure using decimal notation including scaling.

| Key Vocabulary |  |
| :--- | :--- |
| Convert | Change from one unit of measure to another |
| Scale (on something) | A set of points on a line for measuring. |
| Scale (Ratio) | A smaller/larger drawing of something. Everything <br> is in proportion to the real thing. |
| Ratio | A way of comparing one quantity to another. |
| Volume | The amount of space taken up by a shape. |
| Capacity | The amount something holds |
| Imperial | A unit of measure, used in the past. Examples <br> include: inches, feet, pints. |
| Metric | A more modern unit of measure. Based on tens, <br> hundreds and thousands. |

## Home Learning

- Use scales (electronic or manual) to measure amounts of liquids/dry goods.
- Use recipe books (including American books which use imperial units of measure)


## Core Knowledge and Representations

Metric units
$1 \mathrm{~km}=1000 \mathrm{~m}$
$1 \mathrm{~kg}=1000 \mathrm{~g}$
$1 \mathrm{~m}=100 \mathrm{~cm}$
$1 \mathrm{~cm}=10 \mathrm{~mm}$
$1 \mathrm{~m}=1000 \mathrm{~mm}$
1litre $=1000 \mathrm{ml}$
$1 \mathrm{~g}=1000 \mathrm{mg}$
kilo (1000)
cent (100)
mill ( $1 / 1000$ )

|  | METRIC | IMPERIAL |
| :--- | :--- | :--- |
| Length | millimetre, centimetre, <br> metre, kilomemtre | inch, foot, <br> yard, mile |
| Mass | milligram, gram, <br> kilogram | ounce, pound, <br> stone |
| Capacity | millilitre, centilitre, litre | pint, gallon |


| Imperial unit | Number of smaller imperial units in it | Metric units (approx) |
| :--- | :--- | :--- |
| 1 inch | None | 2.5 cm |
| 1 foot | 12 inches | 30 cm |
| 1 yard | 3 feet | 91.4 cm |
| 1 mile | 1760 yards | 1.6 km |
| 1 ounce | None | 28 g |
| 1 pound | 16 ounces | 453 g |
| 1 stone | 14 pounds | 6.4 kg |
| 1 pint | None | 568 ml |
| 1 gallon | 8 pints | 4.5 litres |

