Avoid measuring and mixing pesticides by selecting ready-to-use formulations. However, if you need to mix pesticides, home gardeners should purchase a set of metric measuring spoons (1, 2, 5, 15 and 25 mL sizes) for easy measurement of pesticides. Mark these measuring spoons “pesticides” so they are not used for measuring food or household items. Store them with your pesticides. Most Domestic pesticide labels give recommendations in mL for both liquid and dry formulations so you don’t have to have an expensive scale to weigh tiny quantities. Another important tool is a metric tape measure so you can measure the area that needs treatment. Accurately measuring and mixing helps avoid overuse of pesticides.

### USEFUL MEASUREMENTS – ENGLISH SYSTEM

<table>
<thead>
<tr>
<th>Linear Measure</th>
<th>Cubic Measure</th>
<th>Mass (Weight) Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 millimetres (mm) = 1 centimetre</td>
<td>Dry Measure</td>
<td>100 grams = 0.1 kilogram (kg)</td>
</tr>
<tr>
<td>100 centimetres (cm) = 1 metre</td>
<td>1,000,000 cubic cm = 1 cubic metre</td>
<td>1000 grams = 1 kilogram (kg)</td>
</tr>
<tr>
<td>SQUARE MEASURE (AREA)</td>
<td>Liquid Measure</td>
<td>DRY – LIQUID EQUIVALENTS</td>
</tr>
<tr>
<td>100 cm x 100 cm = 10,000 cm² = 1 m²</td>
<td>100 millilitres (mL) = 0.1 litre (L)</td>
<td>1 cubic centimetre (cm³) = 1 mL</td>
</tr>
<tr>
<td>100 m x 100 m = 10,000 m² = 1 hectare</td>
<td>1000 millilitres (mL) = 1 litre (L)</td>
<td>1 cubic metre (m³) = 1000L</td>
</tr>
</tbody>
</table>

### USEFUL MEASUREMENTS – METRIC SYSTEM

<table>
<thead>
<tr>
<th>Linear Measure</th>
<th>Cubic Measure</th>
<th>Mass (Weight) Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 millimetres (mm) = 1 centimetre</td>
<td>Dry Measure</td>
<td>100 grams = 0.1 kilogram (kg)</td>
</tr>
<tr>
<td>100 centimetres (cm) = 1 metre</td>
<td>1,000,000 cubic cm = 1 cubic metre</td>
<td>1000 grams = 1 kilogram (kg)</td>
</tr>
<tr>
<td>SQUARE MEASURE (AREA)</td>
<td>Liquid Measure</td>
<td>DRY – LIQUID EQUIVALENTS</td>
</tr>
<tr>
<td>100 cm x 100 cm = 10,000 cm² = 1 m²</td>
<td>100 millilitres (mL) = 0.1 litre (L)</td>
<td>1 cubic centimetre (cm³) = 1 mL</td>
</tr>
<tr>
<td>100 m x 100 m = 10,000 m² = 1 hectare</td>
<td>1000 millilitres (mL) = 1 litre (L)</td>
<td>1 cubic metre (m³) = 1000L</td>
</tr>
</tbody>
</table>

### PARTS PER MILLION AND WEIGHT/VOLUME EQUIVALENTS

<table>
<thead>
<tr>
<th>Parts per Million</th>
<th>Weight/Volume Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 percent (%) = 10,000 parts per million (ppm)</td>
<td>1 milligram (mg) /litre (water) = 1 ppm</td>
</tr>
<tr>
<td>1 fl. oz./Imperial gallon = 6250 ppm</td>
<td>1 gram (g) /litre (water) = 1000 ppm</td>
</tr>
<tr>
<td>1 gallon in 1,000,000 gallons = 1 ppm</td>
<td>1 millilitre (mL) /litre = 1000 ppm</td>
</tr>
<tr>
<td>1 litre in 1,000,000 litres = 1 ppm</td>
<td>1 mL / 1000 litres = 1 ppm</td>
</tr>
<tr>
<td>1 gram water = 1 millilitre water @ 4°C</td>
<td>1 kilogram water = 1 litre water @ 4°C</td>
</tr>
</tbody>
</table>
## METRIC CONVERSION TABLE

<table>
<thead>
<tr>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Find</td>
<td>Divide By LENGTH</td>
<td>When You Know</td>
<td>To Find</td>
<td>Divide By MASS</td>
<td>When You Know</td>
</tr>
<tr>
<td>inches (in.)</td>
<td>2.5</td>
<td>centimetres</td>
<td>ounces (oz.)</td>
<td>28</td>
<td>grams</td>
</tr>
<tr>
<td>feet (ft.)</td>
<td>30</td>
<td>centimetres</td>
<td>pounds (lb.)</td>
<td>0.45</td>
<td>kilograms</td>
</tr>
<tr>
<td>yards (yd.)</td>
<td>0.9</td>
<td>metres</td>
<td>short tons</td>
<td>0.9</td>
<td>metric tonnes (t)</td>
</tr>
<tr>
<td>miles (mi.)</td>
<td>1.6</td>
<td>kilometres</td>
<td>grams (g)</td>
<td>0.035</td>
<td>ounces</td>
</tr>
<tr>
<td>centimetres (cm)</td>
<td>0.4</td>
<td>inches</td>
<td>kilograms (kg)</td>
<td>2.2</td>
<td>pounds</td>
</tr>
<tr>
<td>metres (m)</td>
<td>1.1</td>
<td>yards</td>
<td>metric tonnes (t)</td>
<td>1.1</td>
<td>short tons</td>
</tr>
</tbody>
</table>

### AREA

<table>
<thead>
<tr>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>square inches (sq.in.)</td>
<td>6.5</td>
<td>square cm</td>
<td>Fahrenheit (°F)</td>
<td>-32 then X 5/9</td>
<td>Celsius (°C)</td>
</tr>
<tr>
<td>square feet (sq.ft.)</td>
<td>0.09</td>
<td>square metres</td>
<td>Celsius (°C)</td>
<td>X 9/5 then + 32</td>
<td>Fahrenheit (°F)</td>
</tr>
<tr>
<td>square yards (sq.yd.)</td>
<td>0.8</td>
<td>square metres</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TEMPERATURE

<table>
<thead>
<tr>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>acres</td>
<td>0.4</td>
<td>hectares</td>
<td>pounds / sq.in.</td>
<td>6.9</td>
<td>kilopascals (kPa)</td>
</tr>
<tr>
<td>square centimetres</td>
<td>0.16</td>
<td>square inches</td>
<td>pounds / sq.in.</td>
<td>0.069</td>
<td>bars</td>
</tr>
<tr>
<td>square metres (m2)</td>
<td>1.2</td>
<td>square yards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hectares (ha)</td>
<td>2.5</td>
<td>acres</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PRESSURE

<table>
<thead>
<tr>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>cubic inches (cu.in.)</td>
<td>16</td>
<td>cubic centimetres</td>
<td>tsp. / Imp. gal.</td>
<td>1</td>
<td>mL or grams / L</td>
</tr>
<tr>
<td>cubic yards (cu.yd.)</td>
<td>0.8</td>
<td>cubic metres</td>
<td>tbsp. / Imp. gal.</td>
<td>3</td>
<td>mL or grams / L</td>
</tr>
<tr>
<td>fluid ounces</td>
<td>28</td>
<td>millilitres (mL)</td>
<td>cups / Imp. gal.</td>
<td>50</td>
<td>mL or grams / L</td>
</tr>
<tr>
<td>Imperial quarts</td>
<td>1.1</td>
<td>litres</td>
<td>oz./gal.</td>
<td>6.2</td>
<td>mL / L</td>
</tr>
<tr>
<td>Imperial gallons</td>
<td>4.54</td>
<td>litres</td>
<td>lb./acre</td>
<td>0.0033</td>
<td>oz. / yd²</td>
</tr>
<tr>
<td>U.S. gallons</td>
<td>3.8</td>
<td>litres</td>
<td>ounces / sq. ft.</td>
<td>305</td>
<td>grams / m²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>oz./ ft. of row</td>
<td>93</td>
<td>grams / m of row</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>feet / second</td>
<td>0.3</td>
<td>metres / second</td>
</tr>
</tbody>
</table>

### APPLICATIONS

<table>
<thead>
<tr>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>