

Metric Units of Measurements

I. SI base units

The metric system of measurement is based not just on the number ten, but also on a set of units of measurement that all nations have agreed on. This “International System of Units” (SI) consists of seven base units (or basic quantities). Some of these you are familiar with from past experience, while others will be new to you. These base units are listed in the chart below.

| Base quantity | SI base unit | |
|---------------------------|--------------|--------|
| | Name | Symbol |
| length | | m |
| mass | | kg |
| time | | s |
| electric current | | A |
| thermodynamic temperature | | K |
| amount of substance | | mol |
| luminous intensity | | cd |

II. SI derived units

The metric system has come up with other units of measurements that are derived from the SI base units through mathematic equations. This list of derived units is quite large, so the following chart will just show some examples of them.

| Table 2. Examples of SI Derived Units | | |
|---------------------------------------|-----------------|-------------------|
| | SI Derived Unit | |
| Derived Quantity | Name | Symbol |
| area | | m ² |
| volume | | m ³ |
| speed, velocity | | m/s |
| acceleration | | m/s ² |
| density | | g/cm ³ |