3. INTERNATIONAL SYSTEM OF UNITS (SI)


<table>
<thead>
<tr>
<th>Physical quantity</th>
<th>Name of unit</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base units</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>length</td>
<td>meter</td>
<td>m</td>
</tr>
<tr>
<td>mass</td>
<td>kilogram</td>
<td>kg</td>
</tr>
<tr>
<td>time</td>
<td>second</td>
<td>s</td>
</tr>
<tr>
<td>electric current</td>
<td>ampere</td>
<td>A</td>
</tr>
<tr>
<td>temperature</td>
<td>kelvin</td>
<td>K</td>
</tr>
<tr>
<td>amount of substance</td>
<td>mole</td>
<td>mol</td>
</tr>
<tr>
<td>luminous intensity</td>
<td>candela</td>
<td>cd</td>
</tr>
<tr>
<td><strong>Derived units with special names</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plane angle</td>
<td>radian</td>
<td>rad</td>
</tr>
<tr>
<td>solid angle</td>
<td>steradian</td>
<td>sr</td>
</tr>
<tr>
<td>frequency</td>
<td>hertz</td>
<td>Hz</td>
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<tr>
<td>energy</td>
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<td>J</td>
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<tr>
<td>force</td>
<td>newton</td>
<td>N</td>
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<tr>
<td>pressure</td>
<td>pascal</td>
<td>Pa</td>
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<tr>
<td>power</td>
<td>watt</td>
<td>W</td>
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<tr>
<td>electric charge</td>
<td>coulomb</td>
<td>C</td>
</tr>
<tr>
<td>electric potential</td>
<td>volt</td>
<td>V</td>
</tr>
<tr>
<td>electric resistance</td>
<td>ohm</td>
<td>Ω</td>
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<tr>
<td>electric conductance</td>
<td>siemens</td>
<td>S</td>
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<td>electric capacitance</td>
<td>farad</td>
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<td>weber</td>
<td>Wb</td>
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<td>inductance</td>
<td>henry</td>
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<td>T</td>
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<tr>
<td>celsius temperature</td>
<td>degree celsius</td>
<td>°C</td>
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<tr>
<td>activity (of a radioactive source)*</td>
<td>becquerel</td>
<td>Bq</td>
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<tr>
<td>absorbed dose (of ionizing radiation)*</td>
<td>gray</td>
<td>Gy</td>
</tr>
<tr>
<td>dose equivalent*</td>
<td>sievert</td>
<td>Sv</td>
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<table>
<thead>
<tr>
<th>SI prefixes</th>
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<tbody>
<tr>
<td>$10^{24}$</td>
<td>yotta (Y)</td>
</tr>
<tr>
<td>$10^{21}$</td>
<td>zetta (Z)</td>
</tr>
<tr>
<td>$10^{18}$</td>
<td>exa (E)</td>
</tr>
<tr>
<td>$10^{15}$</td>
<td>peta (P)</td>
</tr>
<tr>
<td>$10^{12}$</td>
<td>tera (T)</td>
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<tr>
<td>$10^9$</td>
<td>giga (G)</td>
</tr>
<tr>
<td>$10^6$</td>
<td>mega (M)</td>
</tr>
<tr>
<td>$10^3$</td>
<td>kilo (k)</td>
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<td>$10^2$</td>
<td>hecto (h)</td>
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<td>10</td>
<td>deca (da)</td>
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<td>deci (d)</td>
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<td>$10^{-9}$</td>
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<td>pico (p)</td>
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<td>$10^{-18}$</td>
<td>atto (a)</td>
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<tr>
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<td>zepto (z)</td>
</tr>
<tr>
<td>$10^{-24}$</td>
<td>yocto (y)</td>
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</tbody>
</table>

*See our section 26, on “Radioactivity and radiation protection,” p. 163.