## Periodic Table of the Elements

<table>
<thead>
<tr>
<th>IA</th>
<th>II A</th>
<th>IIIB</th>
<th>IV B</th>
<th>VB</th>
<th>V B</th>
<th>VII B</th>
<th>VIII</th>
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</thead>
<tbody>
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<td>Sc</td>
<td>Ti</td>
<td>V</td>
<td>Cr</td>
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<td>Re</td>
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<td>Ac</td>
<td>Rf</td>
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<td>Bh</td>
<td>Hs</td>
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### Lanthanides

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<th>Pm</th>
<th>Sm</th>
<th>Eu</th>
<th>Gd</th>
<th>Tb</th>
<th>Dy</th>
<th>Ho</th>
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### Actinides

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<th>Th</th>
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<th>U</th>
<th>Np</th>
<th>Pu</th>
<th>Am</th>
<th>Cm</th>
<th>Bk</th>
<th>Cf</th>
<th>Es</th>
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<tr>
<td>232.0</td>
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<td>238.0</td>
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### Solubility Table

<table>
<thead>
<tr>
<th>Ion</th>
<th>Solubility</th>
<th>Exceptions</th>
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</thead>
<tbody>
<tr>
<td>NO₃⁻</td>
<td>soluble</td>
<td>none</td>
</tr>
<tr>
<td>ClO₄⁻</td>
<td>soluble</td>
<td>none</td>
</tr>
<tr>
<td>Cl⁻</td>
<td>soluble</td>
<td>except Ag⁺, Hg₂²⁺, Pb²⁺</td>
</tr>
<tr>
<td>SO₄²⁻</td>
<td>soluble</td>
<td>except Ca²⁺, Ba²⁺, Sr²⁺, Hg²⁺, Pb²⁺, Ag⁺</td>
</tr>
<tr>
<td>CO₃²⁻</td>
<td>insoluble</td>
<td>except Group IA and NH₄⁺</td>
</tr>
<tr>
<td>PO₄³⁻</td>
<td>insoluble</td>
<td>except Group IA and NH₄⁺</td>
</tr>
<tr>
<td>CrO₄²⁻</td>
<td>insoluble</td>
<td>except Group IA, IIA and NH₄⁺</td>
</tr>
<tr>
<td>-OH</td>
<td>insoluble</td>
<td>except Group IA, Ca²⁺, Ba²⁺, Sr²⁺</td>
</tr>
<tr>
<td>S²⁻</td>
<td>insoluble</td>
<td>except Group IA, IIA and NH₄⁺</td>
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<td>Na⁺</td>
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<td>NH₄⁺</td>
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</tr>
<tr>
<td>K⁺</td>
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</tbody>
</table>

*slightly soluble