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| Solubility of Some Ionic Compounds in Water |
| **Always Soluble** Alkali metals = Li+, Na+, K+, Rb+, Cs+  Ammonium = NH4+ Memorize the Always Soluble Ones! These are the only ones you need to memorize. Others will be provided as needed. Acetate = C2H3O2   Chlorate = ClO3  Nitrate = NO3 Perchlorate = ClO4  | AAACNP |
| **Generally Soluble** Cl, Br-, I *Except when with*: Ag+, Pb2+, Hg22+ | AP-H |
|  F *Except when with*: Ca2+, Ba2+, Sr2+, Pb2+, Mg2+ | CBS-PM |
|  Sulfate = SO42- *Except when with*: Ca2+, Ba2+, Sr2+, Pb2+ | CBS-P |
| **Generally Insoluble** O2, OH *Except when with*: Alkali metals and NH4+   *Somewhat* soluble: Ca2+, Ba2+, Sr2+  | AACBS |
|  CO2 2, CO32  S2, SO32 *Except when with*: Alkali metals and NH4+ PO43 CrO42, Cr2O42  | AA |

**Insoluble** = forms precipitate

*Acronyms to help with memorizing the rules.*

**Soluble** = dissolves in water (aqueous)