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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  | AAA  CNP |
| **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+ | AA  CBS |
| 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)