

# Solubility Rules

• **Knowing whether substances are **soluble** or **insoluble** tells us if a precipitate forms...**

1) Salts of ammonium and alkali metals are always **soluble**

2) All chlorides, bromides, and iodides are **soluble** except when combined with Ag, Hg<sup>2+</sup>, and Pb which are **insoluble**

3) Chlorates, acetates, and nitrates are **soluble**

4) Sulfates are **soluble** except with Ca, Sr, Ba, Hg, Pb, and Ag which are **insoluble**



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• **Knowing whether substances are **soluble** or **insoluble** tells us if a precipitate forms...**

5) Phosphates, carbonates, and sulfides are **insoluble** except ammonium and alkali metal compounds are **soluble**

6) All metallic oxides are **insoluble** except ammonium and alkali metal compounds are **soluble**

7) All hydroxides are **insoluble** except ammonium, alkali metal compounds, and group 2A from Ca down are **soluble**

