

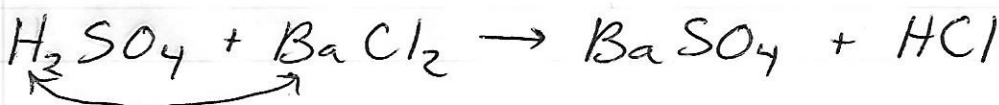
Predicting Precipitates

Samples

- ① Identify the precipitate formed when the following ionic compounds are mixed:



Predict products (double replacement)



for BaSO₄

High Solubility (aq)

Low Solubility (s)

SO₄⁻²
most

Ag⁺, Pb⁺², Ca⁺²,
Ba⁺², Sr⁺², Ra⁺²

- SO₄⁻² is the anion, so use this column

- Ba⁺² is the cation

- low solubility, therefore BaSO₄(s)

for HCl

High Solubility (aq)

low Solubility (s)

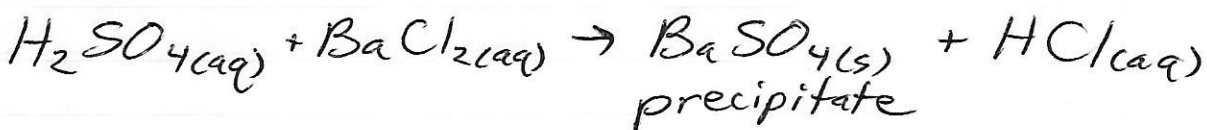
Cl⁻, Br⁻, I⁻
most

Ag⁺, Pb⁺², Tl⁺,
Hg₂⁺², (Hg⁺), Cu⁺

- Cl⁻ is the anion so use this column

- H⁺ is the cation

- H⁺ is not listed in the low solubility row so we assume it is part of the "most" in the high solubility row, therefore HCl(aq)



② Identify the precipitate formed when the following ionic compounds are mixed:

