

## Solubility Rules Worksheet

1. Name or give the chemical formula for each of the following compounds.
2. State whether they are soluble (will dissolve) or insoluble (will not dissolve) in solution. Use solubility rules.

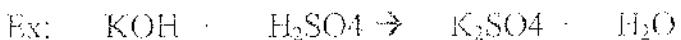
Chemical Formula	Name	Solubility
1. $\text{NH}_4\text{Cl}(\text{C}_2\text{CO}_3)$		
2. $\text{Ba}(\text{OH})_2$		
3.	Iron(III) Carbonate	
4. $\text{NaOH}$		
5. $\text{RbNO}_3$		
6.	Cesium Sulfate	
7. $\text{MgSO}_4$		
8. $\text{ZnCl}_2$		
9.	Zinc Hydroxide	
10. $\text{Zn}_3(\text{PO}_4)_2$		
11. $\text{AgBr}$		
12. $\text{KNO}_3$		
13. $\text{Al}_2\text{S}_3$		
14.	Silver Acetate	
15. $\text{Sr}_3(\text{CrO}_4)_2$		
16.	Ammonium Phosphate	
17. $\text{BaSO}_4$		
18. $\text{Cu(OH)}_2$		
19. $\text{FeBr}_3$		
20. $\text{Mg}_3(\text{PO}_4)_2$		
21.	Iron(III) sulfide	
22. $\text{Na}_3\text{AlF}_6$		
23.	Silver Iodide	
24. $\text{Hg}_2\text{SO}_4$		
25.	Lithium Chloride	

## Oxidation States

$\text{Ca}^{+2}$	$\text{OH}^{-1}$
$\text{K}^{+1}$	$\text{PO}_4^{3-}$
$\text{H}^{+1}$	$\text{CO}_3^{-2}$
$\text{Ba}^{+2}$	$\text{Cl}^{-1}$
$\text{Cd}^{+2}$	$\text{S}^{-2}$
$\text{CO}^{+2}$	$\text{NO}_3^{-1}$
$\text{Ag}^{+1}$	
$\text{Na}^{+1}$	$\text{SO}_4^{-2}$
$\text{Al}^{+3}$	$\text{C}_2\text{H}_3\text{O}_2^-$
$\text{Cr}^{+3}$	$\text{SO}_3^{-2}$
$\text{NH}_4^{+1}$	$\text{C}_6\text{H}_5\text{O}_4^{-2}$

### Double Replacement Reactions

The Cations and Anions switch partners:  $\text{AB} + \text{XY} \rightarrow \text{AY} + \text{BX}$



Check the oxidation number to calculate the correct number of atoms.

Write correct formulas for the products in these double replacement reactions

