

## Worksheet 5 – Hydrolysis

Classify each formula as an acid anhydride, basic anhydride, strong acid, weak acid, strong, or weak base. For each formula write an equation to show how it reacts with water. For anhydrides write two equations.

Formula	Classification	Reaction
Na <sub>2</sub> O	_____	
CaO	_____	
SO <sub>3</sub>	_____	
CO <sub>2</sub>	_____	
HCl	_____	
NH <sub>3</sub>	_____	
NaOH	_____	
HF	_____	
H <sub>3</sub> PO <sub>4</sub>	_____	
KCl	_____	
HNO <sub>3</sub>	_____	
NaHCO <sub>3</sub>	_____	

$\text{AlCl}_3$  \_\_\_\_\_

$\text{LiHCO}_3$  \_\_\_\_\_

$\text{Na}_2\text{CO}_3$  \_\_\_\_\_

$\text{Na}_2\text{HPO}_4$  \_\_\_\_\_

$\text{NaHSO}_3$  \_\_\_\_\_

$\text{NaNO}_3$  \_\_\_\_\_

$\text{NaCN}$  \_\_\_\_\_

$\text{Fe}(\text{NO}_3)_3$  \_\_\_\_\_