

# Chlorides, Bromides, and Iodides Worksheet

## Part 1.

1. What effect does the silver nitrate have upon the halogen salt solutions?
  
2. What effect does the ammonia water (ammonium hydroxide) have upon the silver chloride, silver bromide, and silver iodide precipitates?
  
3. Complete the following equations
   

$$\text{AgNO}_3(\text{aq}) + \text{NaCl}(\text{aq}) \rightarrow \text{_____} + \text{_____}$$

$$\text{AgNO}_3(\text{aq}) + \text{NaBr}(\text{aq}) \rightarrow \text{_____} + \text{_____}$$

$$\text{AgNO}_3(\text{aq}) + \text{NaI}(\text{aq}) \rightarrow \text{_____} + \text{_____}$$

## Part 2.

Halogen Ion	Effect of $\text{Cl}_2$ Water	Color of the Hexane Solution
Chloride	$2\text{Cl}^- + \text{Cl}_2 \rightarrow \text{_____}$	_____
Bromide	$2\text{Br}^- + \text{Cl}_2 \rightarrow \text{_____}$	_____
Iodide	$2\text{I}^- + \text{Cl}_2 \rightarrow \text{_____}$	_____

## Part 3.

1. Record the observations and conclusion of the unknown halide below.