

Chemical Formula Writing Worksheet

Determine the chemical formula for each cation and anion combination. Write your answers in each box.

Set 1 (The combining power of silver is 1 and zinc is 2)

Cations +	Anions -	chloride	oxide	iodide	hydride	sulfide	nitride
Sodium							
Potassium							
Magnesium							
Calcium							
Copper(I)							
Iron(II)							
Iron(III)							
Silver							
Zinc							
Aluminum							

Set 2

Cations +	Anions -	bromide	oxide	fluoride	astatide	selenide	phosphide
Lithium							
Barium							
Cesium							
Strontium							
Copper(I)							
Copper(II)							
Lead(II)							
Lead(IV)							
Gallium							
Nickel(II)							

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Determine the chemical formula for each cation and anion combination. Write your answers in each box.

Brackets are only needed when the polyatomic group is greater than 1. Eg. Strontium phosphate, $\text{Sr}_3(\text{PO}_4)_2$

Set 3 (The combining power of silver is 1 and zinc is 2. The formula for the ammonium ion is NH_4^+)

Cations +	Anions -		nitrate NO_3^-	sulfate SO_4^{2-}	hydroxide OH^-	carbonate CO_3^{2-}	phosphate PO_4^{3-}	hydrogen carbonate HCO_3^-
	Sodium	Potassium						
Sodium								
Potassium								
Magnesium								
Barium								
Iron(II)								
Iron(III)								
Silver								
Zinc								
Aluminum								
Ammonium								

Set 4 (The combining power of silver is 1 and zinc is 2. The formula for the ammonium ion is NH_4^+)

Cations +	Anions -		nitrite NO_2^-	chromate CrO_4^{2-}	sulfite, SO_3^{2-}	dichromate $\text{Cr}_2\text{O}_7^{2-}$	chlorate ClO_3^-	acetate* CH_3COO^-
	Lithium	Mercury(I)						
Lithium								
Mercury(I)								
Tin(II)								
Silver								
Iron(II)								
Iron(III)								
Barium								
Zinc								
Aluminum								
Ammonium								

* The acetate group, CH_3COO^- is written first as this correctly shows the position of the ionic bond. Eg. $\text{CH}_3\text{COO}^-\text{Na}^+$