

3 • What Happens When Chemicals Are Put Together?

WRITING IONIC COMPOUNDS

Ionic compounds are formed from a positive ion (cation) and a negative ion (anion).

The positive ion is always written first. • The resulting compound must be electrically neutral.

Use parentheses when you need two or more polyatomic ions in a formula.

Write a compound with the specified number of ions:

1.	2 NH ₄ ⁺ ions	1 SO ₄ ²⁻ ion	
2.	2 Al ³⁺ ions	3 O ²⁻ ions	
3.	1 Ca ²⁺ ion	2 C ₂ H ₃ O ₂ ⁻ ions	
4.	1 Fe ³⁺ ion	3 NO ₃ ⁻ ions	
5.	1 Hg ²⁺ ion	2 OH ⁻ ions	

Determine the number of ions needed for the compound and then write the formula of the compound:

#	# Cations	Cation	# Anions	Anion	Formula
6.		NH ₄ ⁺		PO ₄ ³⁻	
7.		Ba ²⁺		NO ₃ ⁻	
8.		Cu ⁺		S ²⁻	
9.		Al ³⁺		CO ₃ ²⁻	
10.		Sr ²⁺		OH ⁻	

Write the compound formed from the two specified ions:

	Γ	OH ⁻	S ²⁻	CrO ₄ ²⁻	PO ₄ ³⁻
K ⁺					
NH ₄ ⁺					
Mg ²⁺					
Al ³⁺					
Sn ⁴⁺					
Cu ²⁺					