

Bonding Practice Test

Using Lewis structures: Draw out or model how an ionic or covalent substance is created.

- We demonstrated this process in class.

Aluminum chloride

N₂ (Nitrogen gas)

1)	Type of bond (I or C)	Electrons: shared or transferred?	2) Write the compound formula formed between the two ions listed.	
Carbon tetrachloride	C	Shared	Al ⁺³ Cl ⁻¹	AlCl ₃
NH ₄ ClO	I	Transfer	Ca ⁺² OH ⁻¹	Ca(OH) ₂
ClO ₂	C	Shared	Al ⁺³ PO ₃ ⁻³	AlPO ₃
Sodium hydroxide	I	Transfer	Sn ⁺⁴ S ⁻²	SnS ₂

3) Compound Name	Compound Formula
Cobalt (III) chloride	Co ⁺³ Cl ⁻¹ → CoCl ₃
Aluminum hydroxide	Al ⁺³ OH ⁻¹ → Al(OH) ₃
Disilicon hexabromide	Si ₂ Br ₆
Lead (IV) sulfate	Pb ⁺⁴ SO ₄ ⁻² → Pb(SO ₄) ₂
Ammonium sulfide	(NH ₄) ₂ S
Calcium acetate	Ca(C ₂ H ₃ O ₂) ₂
Manganese (II) chromate	MnCrO ₄
Nitrogen trifluoride	NF ₃
trichromium dinitride	Cr ₃ N ₂
cadmium phosphide	Cd ₃ P ₂
Zn(OH) ₂	Zn(OH) ₂
water	H ₂ O

In the beakers below, model the dissolving of Aluminum Chloride and Sulfur dioxide in each beaker.

