

Ionic formulas 2

Before you answer the puzzles below fill in the table of formulas:

anion	calcium compound	sodium compound	aluminium compound	potassium compound
chloride	CaCl ₂		AICI ₃	
sulfate	CaSO ₄		Al ₂ (SO ₄) ₃	
hydroxide			Al(OH)₃	
nitrate				KNO ₃
carbonate				K ₂ CO ₃
phosphate		Na ₃ PO ₄		K ₃ PO ₄
oxide		Na₂O		K₂O
iodide				KI
sulfide	CaS			
hydrogen carbonate	Ca(HCO ₃) ₂		AI(HCO3)3	
bromide	CaBr ₂		AlBr ₃	

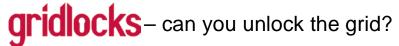
Gridlock 1

Each row, column and 2 x 2 box contains a carbonate, sulfate, hydroxide and nitrate. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

calcium compounds		sodium compounds	
CaSO ₄			Na₂CO₃
			KNO₃
Al(OH) ₃			
aluminium compounds		potassium	compounds







Puzzle 2

Each row, column and 2 x 2 box contains chlorides, oxides, phosphates and iodides.

calcium compound		sodium compounds	
CaCl ₂			Nal
	Cal ₂	NaCl	
	Al ₂ O ₃		
		K₃PO₄	
aluminium compounds		potassium	compounds

Puzzle 3

Each row, column and 2 x 2 box contains carbonates, sulphides, hydrogen carbonates and bromides.

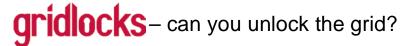
calcium compounds		sodium compounds	
CaS			
		NaBr	
		K ₂ CO ₃	
	AI(HCO₃)₃		



aluminium compounds



potassium compounds



Ionic formulas 2 - answers

Before you answer the puzzles below fill in the table of formulas:

anion	calcium compound	sodium compound	aluminium compound	potassium compound
chloride	CaCl ₂	NaCl	AICI ₃	KCI
sulfate	CaSO ₄	Na ₂ SO ₄	Al ₂ (SO ₄) ₃	K ₂ SO ₄
hydroxide	Ca(OH) ₂	NaOH	AI(OH) ₃	КОН
nitrate	Ca(NO ₃) ₂	NaNO ₃	AI(NO ₃) ₃	KNO ₃
carbonate	CaCO₃	Na ₂ CO ₃	Al ₂ (CO ₃) ₃	K₂CO₃
phosphate	Ca ₃ (PO ₄) ₂	Na ₃ PO ₄	AIPO ₄	K ₃ PO ₄
oxide	CaO	Na ₂ O	Al ₂ O ₃	K ₂ O
iodide	Cal ₂	Nal	All ₃	KI
sulfide	CaS	Na₂S	Al ₂ S ₃	K ₂ S
hydrogen carbonate	Ca(HCO ₃) ₂	NaHCO ₃	AI(HCO3)3	KHCO ₃
bromide	CaBr ₂	NaBr	AlBr ₃	KBr

Puzzle 1 - answers

calcium compounds		sodium compounds	
CaSO ₄	Ca(OH) ₂	NaNO₃	Na₂CO₃
Ca(NO ₃) ₂	CaCO₃	Na ₂ SO ₄	NaOH
Al ₂ (CO ₃) ₃	Al ₂ (SO ₄) ₃	КОН	KNO₃
Al(OH)₃	AI(NO ₃) ₃	K ₂ CO ₃	K ₂ SO ₄
aluminium compounds		potassium	compounds





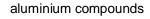
gridlocks - can you unlock the grid?

Puzzle 2 - answers

calcium compounds		sodium compounds	
CaCl₂	Ca ₃ (PO ₄) ₂	Na₂O	Nal
СаО	Cal ₂	NaCl	Na₃PO₄
AIPO4	Al ₂ O ₃	KI	KCI
All ₃	AlCl₃	K₃PO₄	K₂O
aluminium compounds		potassium	compounds

Puzzle 3 - answers

calcium compounds		sodium co	ompounds
CaS	CaBr₂	NaHCO₃	Na₂CO₃
Ca(HCO ₃) ₂	CaCO₃	NaBr	Na₂S
AlBr ₃	Al ₂ S ₃	K₂CO₃	KHCO₃
Al ₂ (CO ₃) ₃	Al(HCO₃)₃	K₂S	KBr



potassium compounds



