

Team Ionic Bonding ANSWERS

set 1	cation	anion	Formula	IUPAC name
1	NH_4^{+1}	F^{-1}	NH_4F	ammonium fluoroide
2	NH_4^{+1}	P^{-3}	$(\text{NH}_4)_3\text{P}$	ammonium phosphide
3	NH_4^{+1}	$\text{C}_2\text{H}_3\text{O}_2^{-1}$	$\text{NH}_4\text{C}_2\text{H}_3\text{O}_2$	ammonium acetate
4	Ba^{+2}	F^{-1}	BaF_2	barium fluoride
5	Ba^{+2}	P^{-3}	Ba_3P_2	barium phosphide
6	Ba^{+2}	$\text{C}_2\text{H}_3\text{O}_2^{-1}$	$\text{Ba}(\text{C}_2\text{H}_3\text{O}_2)_2$	Barium acetate

set 2	cation	anion	Formula	IUPAC name
1	Li^{+1}	Cl^{-1}	LiCl	lithium chloride
2	Li^{+1}	CN^{-1}	LiCN	lithium cyanide
3	Li^{+1}	O_2^{-2}	Li_2O_2	lithium peroxide
4	Sr^{+2}	Cl^{-1}	SrCl_2	strontium chloride
5	Sr^{+2}	CN^{-1}	$\text{Sr}(\text{CN})_2$	strontium cyanide
6	Sr^{+2}	O_2^{-2}	SrO_2	strontium peroxide

set 3	cation	anion	Formula	IUPAC name
1	Na^{+1}	Br^{-1}	NaBr	sodium bromide
2	Na^{+1}	P^{-3}	Na_3P	sodium phosphide
3	Na^{+1}	OH^{-1}	NaOH	sodium hydroxide
4	Ca^{+2}	Br^{-1}	CaBr_2	calcium bromide
5	Ca^{+2}	P^{-3}	Ca_3P_2	calcium phosphide
6	Ca^{+2}	OH^{-1}	$\text{Ca}(\text{OH})_2$	calcium hydroxide

set 4	cation	anion	Formula	IUPAC name
1	K^{+1}	I^{-1}	KI	potassium iodide
2	K^{+1}	CO_3^{-2}	K_2CO_3	potassium carbonate
3	K^{+1}	PO_4^{-3}	K_3PO_4	potassium phosphate
4	Mg^{+2}	I^{-1}	MgI_2	magnesium iodide
5	Mg^{+2}	CO_3^{-2}	MgCO_3	magnesium carbonate
6	Mg^{+2}	PO_4^{-3}	$\text{Mg}_3(\text{PO}_4)_2$	magnesium phosphate

set 5	cation	anion	Formula	IUPAC name
1	Rb^{+1}	HCO_3^{-1}	RbHCO_3	rubidium hydrogen carbonate
2	Rb^{+1}	$\text{C}_2\text{O}_4^{-2}$	$\text{Rb}_2\text{C}_2\text{O}_4$	rubidium oxalate
3	Rb^{+1}	ClO_3^{-1}	RbClO_3	rubidium chlorate
4	Al^{+3}	HCO_3^{-1}	$\text{Al}(\text{HCO}_3)_3$	aluminum hydrogen carbonate
5	Al^{+3}	$\text{C}_2\text{O}_4^{-2}$	$\text{Al}_2(\text{C}_2\text{O}_4)_3$	aluminum oxalate
6	Al^{+3}	ClO_3^{-1}	$\text{Al}(\text{ClO}_3)_3$	aluminum chlorate

set 6	cation	anion	Formula	IUPAC name
1	Cs^{+1}	ClO^{-1}	CsClO	cesium hypochlorite
2	Cs^{+1}	CrO_4^{-2}	Cs_2CrO_4	cesium chromate
3	Cs^{+1}	SO_3^{-2}	Cs_2SO_3	cesium sulfite
4	NH_4^{+1}	ClO^{-1}	NH_4ClO	ammonium hypochlorite
5	NH_4^{+1}	CrO_4^{-2}	$(\text{NH}_4)_2\text{CrO}_4$	ammonium chromate
6	NH_4^{+1}	SO_3^{-2}	$(\text{NH}_4)_2\text{SO}_3$	ammonium sulfite

set 7	cation	anion	Formula	IUPAC name
1	Mg^{+2}	O^{-2}	MgO	Magnesium oxide
2	Mg^{+2}	SO_4^{-2}	MgSO_4	Magnesium sulfate
3	Mg^{+2}	SCN^{-1}	$\text{Mg}(\text{SCN})_2$	Magnesium thiocyanate
4	Li^{+1}	O^{-2}	Li_2O	Lithium oxide
5	Li^{+1}	SO_4^{-2}	Li_2SO_4	Lithium sulfate
6	Li^{+1}	SCN^{-1}	LiSCN	Lithium thiocyanate

set 8	cation	anion	Formula	IUPAC name
1	Ca^{+2}	S^{-2}	CaS	Calcium sulfide
2	Ca^{+2}	HCO_3^{-1}	$\text{Ca}(\text{HCO}_3)_2$	calcium hydrogen carbonate
3	Ca^{+2}	Cl^{-1}	CaCl_2	Calcium chloride
4	Na^{+1}	S^{-2}	Na_2S	Sodium sulfide
5	Na^{+1}	HCO_3^{-1}	NaHCO_3	sodium hydrogen carbonate
6	Na^{+1}	Cl^{-1}	NaCl	Sodium chloride

set 9	cation	anion	Formula	IUPAC name
1	Sr^{+2}	F^{-1}	SrF_2	Strontium flouride
2	Sr^{+2}	ClO_4^{-1}	$\text{Sr}(\text{ClO}_4)_2$	Strontium perchlorate
3	Sr^{+2}	$\text{S}_2\text{O}_3^{-2}$	SrS_2O_3	Strontium thiosulfate
4	K^{+1}	F^{-1}	KF	Potassium flouride
5	K^{+1}	ClO_4^{-1}	KClO_4	Potassium perchlorate
6	K^{+1}	$\text{S}_2\text{O}_3^{-2}$	$\text{K}_2\text{S}_2\text{O}_3$	Potassium thiosulfate

set 10	cation	anion	Formula	IUPAC name
1	Ba^{+2}	Cl^{-1}	BaCl_2	barium chloride
2	Ba^{+2}	$\text{Cr}_2\text{O}_7^{-2}$	BaCr_2O_7	barium dichromate
3	Ba^{+2}	ClO_3^{-1}	$\text{Ba}(\text{ClO}_3)_2$	barium chlorate
4	Rb^{+1}	Cl^{-1}	RbCl	rubidium chloride
5	Rb^{+1}	$\text{Cr}_2\text{O}_7^{-2}$	$\text{Rb}_2\text{Cr}_2\text{O}_7$	rubidium dichromate
6	Rb^{+1}	ClO_3^{-1}	RbClO_3	rubidium chlorate

set 11	cation	anion	Formula	IUPAC name
1	Li^{+1}	Br^{-1}	LiBr	lithium bromide
2	Li^{+1}	MnO_4^{-1}	LiMnO_4	lithium permangante
3	Li^{+1}	HSO_4^{-1}	LiHSO_4	lithium hydrogen sulfate
4	Cs^{+1}	Br^{-1}	CsBr	cesium bromide
5	Cs^{+1}	MnO_4^{-1}	CsMnO_4	cesium permangante
6	Cs^{+1}	HSO_4^{-1}	CsHSO_4	cesium hydrogen sulfate

set 12	cation	anion	Formula	IUPAC name
1	Ca^{+2}	I^{-1}	CaI_2	calcium iodide
2	Ca^{+2}	NO_2^{-1}	$\text{Ca(NO}_2)_2$	calcium nitrite
3	Ca^{+2}	CO_3^{-2}	CaCO_3	calcium carbonate
4	Al^{+3}	I^{-1}	AlI_3	aluminum iodide
5	Al^{+3}	NO_2^{-1}	$\text{Al(NO}_2)_3$	aluminum nitrite
6	Al^{+3}	CO_3^{-2}	$\text{Al}_2(\text{CO}_3)_3$	aluminum carbonate