

Name: Key
 Blk: _____ Date: _____

Science 9
Writing Simple Formulas the Criss-Cross Method

Write the **formulas** of the compounds produced from the listed ions:

	F ⁻	O ²⁻	N ³⁻	P ³⁻	S ²⁻	Cl ¹⁻
Na ¹⁺	NaF	Na ₂ O	Na ₃ N	Na ₃ P	Na ₂ S	NaCl
Be ²⁺	BeF ₂	BeO	Be ₃ N ₂	Be ₃ P ₂	BeS	BeCl ₂
Sc ³⁺	ScF ₃	Sc ₂ O ₃	ScN	ScP	Sc ₂ S ₃	ScCl ₃
Zr ⁴⁺	ZrF ₄	ZrO ₂	Zr ₃ N ₄	Zr ₃ P ₄	ZrS ₂	ZrCl ₄
Ta ⁵⁺	TaF ₅	Ta ₂ O ₅	Ta ₃ N ₅	Ta ₃ P ₅	Ta ₂ S ₅	TaCl ₅
Hf ⁴⁺	HfF ₄	HfO ₂	Hf ₃ N ₄	Hf ₃ P ₄	HfS ₂	HfCl ₄
La ³⁺	LaF ₃	La ₂ O ₃	LaN	LaP	La ₂ S ₃	LaCl ₃
Sr ²⁺	SrF ₂	SrO	Sr ₃ N ₂	Sr ₃ P ₂	SrS	SrCl ₂
K ¹⁺	KF	K ₂ O	K ₃ N	K ₃ P	K ₂ S	KCl

Formula Assignment #1
Compound Names and Formulas
Elements with ONE Combining Capacity ONLY

Name these Compounds

I_2S Hydrogen sulphide

CaO Calcium oxide

NaF Sodium fluoride

$CaBr_2$ Calcium bromide

$MgCl_2$ Magnesium chloride

BBr_3 Boron bromide

Cs_2O Cesium oxide

$FrBr$ Francium bromide

Ag_2S Silver sulphide

10. GeF_4 Germanium fluoride

11. Ga_2O_3 Gallium oxide

12. $EsCl_3$ Einsteinium chloride

13. Fm_2O_3 Fermium oxide

14. Mg_3N_2 Magnesium nitride

15. Rb_2O Rubidium oxide

16. RaO Radium oxide

17. SrO Strontium oxide

18. Tc_2O_7 Technetium oxide

Write the correct chemical formula for these compounds by using the cross rule.

sodium chloride $NaCl$

magnesium fluoride MgF_2

silver oxide Ag_2O

indium bromide $InBr_3$

zinc bromide $ZnBr_2$

neodymium oxide Nd_2O_3

thorium sulphide ThO_2

actinium oxide Ac_2O_3

radium bromide $RaBr_2$

cesium oxide Cs_2O

11. hydrogen oxide H_2O

12. francium nitride Fr_3N

13. rubidium phosphide Rb_3P

14. potassium oxide K_2O

15. beryllium sulphide BeS

16. lithium sulphide Li_2S

17. hydrogen bromide HBr

18. strontium nitride Sr_3N_2

19. calcium oxide CaO

20. tantalum nitride Ta_3N_5