

CHEMISTRY 11

Nomenclature

Name the following compounds. Note that the metallic part of the chemical formulas have multiple valences and the valence must be shown by a Roman numeral.

1. CuCl copper (I) chloride
2. CoCl_2 cobalt (II) chloride
3. Fe_2O_3 iron (III) oxide
4. CuBr_2 copper (II) bromide
5. MnO manganese (II) oxide
6. PtCl_4 platinum (IV) chloride
7. EuI_3 europium (III) iodide
8. FeO iron (II) oxide
9. CuS copper (II) sulphide
10. SmBr_2 samarium (II) bromide
11. Mn_2O_3 manganese (III) oxide
12. Au_2O_3 gold (III) oxide
13. FeBr_3 iron (III) bromide
14. CuCl_2 copper (II) chloride

Non-metals		Fluoride	Chloride	Bromide	Iodide	Oxide	Sulphide	Nitride	Phosphide	Arsenide	Selenide	
Symbol		F ⁻	Cl ⁻	Br ⁻	I ⁻	O ²⁻	S ²⁻	N ³⁻	P ³⁻	As ³⁻	Se ²⁻	
Valence Oxidation State		-1	-1	-1	-1	-2	-2	-3	-3	-3	-2	
Metals		Symbol	Valence									
Hydrogen	H ⁺	+1	HF	HCl	HBr	HI	H ₂ O	H ₂ S	H ₃ N	H ₃ P	H ₃ As	H ₂ Se
Lithium	Li ⁺	+1	LiF	LiCl	LiBr	LiI	Li ₂ O	Li ₂ S	Li ₃ N	Li ₃ P	Li ₃ As	Li ₂ Se
Beryllium	Be ²⁺	+2	BeF ₂	BeCl ₂	BeBr ₂	BeI ₂	BeO	BeS	Be ₃ N ₂	Be ₃ P ₂	Be ₃ As ₂	BeSe
Sodium	Na ⁺	+1	NaF	NaCl	NaBr	NaI	Na ₂ O	Na ₂ S	Na ₃ N	Na ₃ P	Na ₃ As	Na ₂ Se
Potassium	K ⁺	+1	KF	KCl	KBr	KI	K ₂ O	K ₂ S	K ₃ N	K ₃ P	K ₃ As	K ₂ Se
Calcium	Ca ²⁺	+2	CaF ₂	CaCl ₂	CaBr ₂	CaI ₂	CaO	CaS	Ca ₃ N ₂	Ca ₃ P ₂	Ca ₃ As ₂	CaSe
Zinc	Zn ²⁺	+2	ZnF ₂	ZnCl ₂	ZnBr ₂	ZnI ₂	ZnO	ZnS	Zn ₃ N ₂	Zn ₃ P ₂	Zn ₃ As ₂	ZnSe
Cadmium	Cd ²⁺	+2	CdF ₂	CdCl ₂	CdBr ₂	CdI ₂	CdO	CdS	Cd ₃ N ₂	Cd ₃ P ₂	Cd ₃ As ₂	CdSe
Aluminum	Al ³⁺	+3	AlF ₃	AlCl ₃	AlBr ₃	AlI ₃	Al ₂ O ₃	Al ₂ S ₃	AlN	AlP	AlAs	Al ₂ Se ₃
Gallium	Ga ³⁺	+3	GaF ₃	GaCl ₃	GaBr ₃	GaI ₃	Ga ₂ O ₃	Ga ₂ S ₃	GaN	GaP	GaAs	Ga ₂ Se ₃
Strontium	Sr ²⁺	+2	SrF ₂	SrCl ₂	SrBr ₂	SrI ₂	SrO	SrS	Sr ₃ N ₂	Sr ₃ P ₂	Sr ₃ As ₂	SrSe
Barium	Ba ²⁺	+2	BaF ₂	BaCl ₂	BaBr ₂	BaI ₂	BaO	BaS	Ba ₃ N ₂	Ba ₃ P ₂	Ba ₃ As ₂	BaSe
Germanium	Ge ⁴⁺	+4	GeF ₄	GeCl ₄	GeBr ₄	GeI ₄	GeO ₂	GeS ₂	Ge ₃ N ₄	Ge ₃ P ₄	Ge ₃ As ₄	GeSe ₂