

OXIDATION STATES

1. Deduce the oxidation state of the metals in each of the compounds or ions shown in the table below. You will also need to consider the correct oxidation state shown by each of the non-metals in the examples.

Compound or ion	Oxidation state	Compound or ion	Oxidation state	Compound or ion	Oxidation state
MnO ₂		K ₂ S		CrCl ₃	
TiCl ₄		MgCl ₂		VF ₅	
TiCl ₄		CrO ₄ ²⁻		Cr ₂ O ₇ ²⁻	
PbO ₂		LiNO ₂		VO ₂ ⁺	
V ₂ O ₅		MnO ₄ ²⁻		AgBr	
ZnSO ₄		Na ₂ S ₂ O ₃		FeCO ₃	

2. Write down the formula of each of the following compounds:

Iron(III) oxide

Iron (II) hydroxide

Sodium dichromate(VI)

Potassium manganate(VII)

Magnesium sulfate(VI)

Colbalt(II) chloride
