REDOX REACTIONS OR NOT?

	Equation (write oxidation states)	Redox reaction (✓/×)	Disproportionation (✓/×)	Species oxidised	Species reduced	Oxidising agent	Reducing agent
1	**Na_2O + H_2O → 2 NaOH** Na +1 +1 H +1 +1 O -2 -2 -2	×					
2	**2 SO_2 + O_2 → 2 SO_3** S +4 +6 O -2 0 -2	✓	×	SO_2	O_2	O_2	SO_2
3	**2 NaBr + H_2SO_4 → Na_2SO_4 + 2 HBr** Na +1 +1 Br -1 -1 H +1 +1 S +6 +6 O -2 -2	×					
4	**2 KBr + F_2 → Br_2 + 2 KF** K +1 +1 Br -1 0 F 0 -1	✓		Br^-	F_2	F_2	Br^-
5	**2 H_2O_2 → 2 H_2O + O_2** H +1 +1 O -1 -2 0	✓	✓	H_2O_2	H_2O_2	H_2O_2	H_2O_2
6	**HCl + NaOH → NaCl + H_2O** Na +1 +1 H +1 +1 +1 Cl -1 -1 O -2 -2	×					
7	**Cl_2 + 2 H_2O → 4 HCl + O_2** O -2 0 H +1 +1 Cl 0 -1	✓	×	H_2O	Cl_2	Cl_2	H_2O
8	**$BaCl_2$ + H_2SO_4 → $BaSO_4$ + 2 HCl** Ba +2 +2 H +1 +1 Cl -1 -1 S +6 +6 O -2 -2	×					
9	**Cl_2 + 2 NaOH → NaCl + NaOCl + H_2O** O -2 -2 -2 H +1 +1 Cl 0 -1 +1 Na +1 +1 +1	✓	✓	Cl_2	Cl_2	Cl_2	Cl_2
10	**3 MnO_4^{2-} + 4 H^+ → 2 MnO_4^- + MnO_2 + 2 H_2O** Mn +6 +7 +4 H +1 +1 O -2 -2 -2 -2	✓	✓	MnO_4^{2-}	MnO_4^{2-}	MnO_4^{2-}	MnO_4^{2-}
11	**$(NH_4)_2Cr_2O_7$ → Cr_2O_3 + N_2 + 4 H_2O** N -3 0 H +1 +1 Cr +6 +3 O -2 -2 -2	✓		NH_4^+	$Cr_2O_7^{2-}$	$Cr_2O_7^{2-}$	NH_4^+