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Answer 1A) If XCl_2 , then X should be a metal with valency 2

Therefore

(1) Sulphate formula: XSO_4

(2) Hydroxide formula: X(OH)_2

Answer 1B) XN is nitride X is a valency 3 metal as nitrogen has valency 3

Therefore Sulphate's formula would be $\text{X}_2(\text{SO}_4)_3$ and Hydroxide formula would be X(OH)_3

Answer 1C) valency of nitrogen in:

1) NO : +2

2) N_2O : +1

3) NO_2 : +4

Answer 2B) The eight metals showing variable valency

1) Iron (Fe) : +2, +3, ...=>

(2) copper (Cu) : +1, +2

(3) Mercury (Hg) : +1, +2

(4) Tin (Sn) : +2, +4

(5) *Le (Pb) : +2, +4

(6) Gold (Au) : +1, +3

(7) Chromium (Cr) : +2, +3, +6

(8) Manganese (Mn) : +2, +3, +4, +6, +7

Answer 2C) Examples of Chemical Equations:

*stat aligned with intended ■

Justifications are provided below.

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(a) One product : $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$

(b) Two Products : $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2 +$

(C) Three Products : $4\text{HNO}_3 \rightarrow 2\text{H}_2\text{O} + 4\text{NO}_2 + \text{O}_2$

(d) four Products : $2\text{KLO}_3 \rightarrow 2\text{K}_4 + 2\text{O}_2 + \text{O}_2$

Answer 2D