

Write half-reactions, and then the balanced net equation

- 1) A zinc rod dipped in silver nitrate solution becomes coated with silver metal.
- 2) Magnesium metal dissolves in strong acid
- 3) Silver metal, which does not dissolve in H_2SO_4 , does dissolve in dilute HNO_3
- 4) ClO^- disproportionates to Cl^- and ClO_3^- in acid
- 5) Dichromate ($\text{Cr}_2\text{O}_7^{2-}$) oxidizes formaldehyde (H_2CO) to formic acid (HCOOH) in acid, forming Cr^{3+}
- 6) PbSO_4 disproportionates to Pb(s) and PbO_2 {automobile battery}
- 7) Copper metal is oxidized to produce Copper II in concentrated nitric acid
- 8) Lead sulfide, insoluble in concentrated HCl , dissolves in dilute nitric acid
- 9) Sulfite ion is air oxidized to sulfate ion (in acidic solution)
- 10) iodate and iodide form iodine in acid