- The pH of a solution can be controlled by adding small amounts of gaseous HCl. Assuming no change in volume, calculate what the pH of the solution must be to just dissolve 1.00 g of NiS suspended in 1.0 L of water.

  Data: $H_2S(aq) \rightleftharpoons 2H^+(aq) + S^{2-}(aq)$ $K = 1.1 \times 10^{-20}\ M^2$

  $K_{sp}(NiS) = 1.0 \times 10^{-22}\ M^2$

Marks 5

pH =