A 2.578 g of leaf sample was dried. The dried material weighting 0.7692 g was ashed and dissolved in a 500 mL. The concentration of a metal in the final solution was reported as 1.75 mg/L. Report the concentration as ppm of the metal in:

  a) **the wet sample**
  b) **the dry sample**
  c) **find % of water in the original sample.**

Answer:

The amount of metal in the whole sample:
m (Me) = 1.75 X 0.5 = 0.875 mg

  a) Concentration of metal in the wet sample is: 0.875 mg / 0.002578 kg = 339 ppm
  b) Concentration of metal in the dry sample is: 0.875 mg / 0.0007692 kg = 1 137 ppm
  c) m (H_2O) = 2.578 – 0.7692 = 1.8088 g
  % (H_2O) = 1.8088/2.578 X 100 = 70%

Answer provided by www.AssignmentExpert.com