Marks
4

- Henry's law relates the solubility of a gas to its pressure. *i.e.* c = kp

  The Henry's law constant for $N_2(g)$ at 298 K is 6.8×10^{-4} mol L^{-1} atm^{-1}. A diver descends to a depth where the pressure is 5 atm. If the diver's body contains about 5 L of blood, calculate the maximum amount of nitrogen gas dissolved in the diver's blood at 1 atm and at 5 atm. (Assume solubility of nitrogen in water and blood to be the same.)

1 atm:	5 atm:

If all the gas dissolved at 5 atm were suddenly released, what volume would it occupy at 1 atm and 298 K?

Answer: