

Take Home Quiz 5.

Due April 23rd. No quizzes accepted after 4 P.M.

Can hand in during class or place in my mailbox across from PS114.

Must SHOW WORK and Circle Answers!

Express answers with the proper significant figures and units!

- 1) A 25.8 L sample of gas has a pressure of 695 torr at 17 °C. What is the volume if the pressure is changed to 1.85 atm and temperature to 72 °C? (5 pts)

- 2) A sample of gas occupies 1.13 L at STP. What is the pressure (atm) of this gas if it occupies 725 mL at 65 °C? (5 pts)

- 3) Calculate the mass percent concentration of a MgCl₂ solution prepared by dissolving 25.0 g of MgCl₂ in 525 g of water. (5 pts)

- 4) What mass of water is required to dissolve 12.5 g of NaCl during the preparation of a 7.25% NaCl solution? (5 pts)

- 5) Calculate the molarity of a K₂SO₄ solution prepared by dissolving 65.5 g of K₂SO₄ in 575 mL of solution. (5 pts)