

Preclass Assignment

CHEM 1090-General Chemistry I

Name:

#20

Section: 31, MWF

Due Date: Friday 9/15/2017

1. A balloon is filled with air to a volume of 3500.0 mL at 23 °C. If the air is heated to 46 °C, calculate the new volume in liters.

2. Calculate the volume, in liters, of 1.0000 mol of an ideal gas at 273.15 K and 1.0000 atm. Use $0.082057 \frac{\text{L atm}}{\text{mol K}}$ as your value of the ideal gas constant, R. See the podcast that discusses the ideal gas constant.