

# Preclass Assignment

## CHEM 1090-General Chemistry I

Name:

#20

Section: 32, MWF

Due Date: Wednesday 3/13/2019

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.