

# Quiz 1 Key

CHEM 105

Quiz 1

Name \_\_\_KEY\_\_\_\_\_

What is the SI unit for each of the following?

Distance \_\_\_meter (m)\_\_\_\_\_

Temperature \_\_\_Kelvin (K)\_\_\_\_\_

Area \_\_\_square meters (m<sup>2</sup>)\_\_\_\_\_

Velocity \_\_\_meters per second (m/s)\_\_\_\_\_

A tennis ball has a mass of 58.5 grams. What is the mass of a tennis ball in nanograms?

$$\frac{58.5 \text{ g}}{1 \text{ ng}} \times \frac{1 \text{ ng}}{10^{-9} \text{ g}} = 58.5 \times 10^9 = 5.85 \times 10^{10} \text{ ng}$$

It is 3.218 km from Sims Science Bldg. to the Shack at Winthrop Lake. What is this distance in micrometers?

$$\frac{3.218 \text{ km}}{1 \text{ km}} \times \frac{10^3 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ }\mu\text{m}}{10^{-6} \text{ m}} = 3.218 \times 10^9 \text{ }\mu\text{m}$$

