# Chemistry Homework Summer 2011

Name: _____

1. Write the following numbers in scientific notation:

   $212,000$

   $0.0031300$

2. Write the following numbers in standard (non-scientific) notation:

   $6.440 \times 10^{3}$

   $9.58 \times 10^{-2}$

3. Find the number of significant figures in the answer to this calculation:

   $2000.0 - 1999.0$

4. Name what the following units measure:

   Kilograms

   Liters

   Meters

   $\frac{g}{mL}$

5. Write whether the following properties are chemical or physical:

   The malleability of aluminum foil

   The melting point of ice cream

   The combustion of paper

6. Write whether the following are homogenous mixtures, heterogeneous mixtures, or pure substances:

   Gasoline

   Copper

   Air

   Salt water

   A stream with gravel at the bottom

7. Using the formula for specific heat, calculate the amount of energy needed to raise the temperature of 1.6g of gold (specific heat $0.13\frac{J}{g^\circ C}$) from $23^\circ C$ to $41^\circ C$: