Student Name: _____ Score:

Write in Scientific Notation

0.3 = _____

0.452 = _____

0.0012 = _____

0.004 = _____

0.5781 = _____

0.009205 = _____

0.0002 = _____

0.7 = _____

0.0258 = _____

0.00004 = _____

Student Name: _____ Score:

Write in Expanded Form

5.4×10^{-4} = _____

3.66×10^{-3} = _____

3.114×10^{-2} = _____

1.3×10^{-5} = _____

6.43×10^{-7} = _____

9×10^{-4} = _____

2.7×10^{-6} = _____

5×10^{-3} = _____

6.708×10^{-5} = _____

Student Name: _____ Score:

Write in Scientific Notation

600 = _____

0.8503 = _____

26×10^{-4} = _____

90004 = _____

526.89 = _____

9.42 = _____

100000 = _____

0.51×10^{-3} = _____

45877.99 = _____

0.00004 = _____

SHOW WORK WHEN NECESSARY

PROBLEM SHEET #1

1. List the "basic" units for the following: (in metrics)

   mass
   weight
   volume
   time
   distance

2. What do the following prefixes mean?

   milli--
   centi--
   deci--
   kilo--

3. Calculate the percent of error if a student measures the length of the table to be 45 cm and the accepted value is 50 cm.

4. If another student measures the same table and finds it to be 55 cm, what is the %error?

5. A student calculated the distance to a point to be 1500km. The accepted value is 1600km. What is the percent deviation?

6. Calculate the volume of a cube, if each side is 5cm.

7. Calculate the volume of a rectangular solid if the sides are 6cm by 7cm by 10cm.

8. Calculate the volume of a rectangular bar, if the sides are 4.3cm by 5.6cm by 7.9cm.

9. Calculate the volume of a sphere whose radius is 1cm.

10. Calculate the volume of a sphere whose radius is 2cm.

Name _____
Earth Science
Problem Worksheet #2

1. Find the density of a 90 gram rock that displaces water in a graduated cylinder from 40 ml to 55 ml.

2. Calculate the density of a rectangular solid if the mass is 100 g and the volume is 40 cm^3.

3. Calculate the density of a cube whose side measures 3 cm and whose mass is 27 grams.

4. Calculate the density of a bar whose mass is 240 g and whose sides measure 5 cm by 4 cm by 3 cm.

5. Find the mass of a cube whose density is 3.0 g/cm^3 and whose sides measure 2 cm.

6. Calculate the density of a sphere if the mass is 80 grams and the volume is 60 cm^3.

7. Calculate the percent error if you measured the density of an object to be 2.5 g/cm^3 and its accepted value is 2.7 g/cm^3.

8. Calculate the percent error if the accepted value is 3.1 g/cm^3 and the student found the density to be 1.8 g/cm^3.

9. Give an observation and then make an inference based on that observation.

10. Find the density of a rock if the mass is 250 grams and the volume of the water in the overflow can is 75 ml.