Quiz 1A

1. Identify each of the following activities in the scientific method as an observation (O), a hypothesis (H), an experiment (E), or a theory (T) (2 points).
	1. Explains why nature behaves the way it does. \_\_T\_\_
	2. Collect data. \_\_O\_\_
2. Rank the following numbers from greatest to least (6 points):

0.15, 0.111 x 106, 4560, 5.48 x 104, 5.78 x 10-7, 15 x 100

0.111 x 106 > 5.48 x 104 > 4560 > 15 x 100 > 0.15 > 5.78 x 10-7

1. Using dimensional analysis convert 1.31 days to Ts (tera = T = 1012) (6 points).

$$1.31 days×\frac{24 hr}{1 day}×\frac{60 min}{1 hr}×\frac{60 s}{1 min}×\frac{10^{-12} Ts}{1 s}=1.13184×10^{-7} Ts=1.13×10^{-7} Ts$$

1. How many significant figures are in the following (2 points):
	1. 0.45378 \_\_\_5\_\_\_
	2. 5.5 \_\_\_2\_\_\_
2. What topic in this class are you most looking forward to learning about (2 points)?
3. Fill in the blank or circle the correct choice (2 points):
4. Record all temperature readings to \_\_\_0.1\_\_\_\_\_\_\_ °C.
5. When finding the drops in a mL you will use a (graduated cylinder/beaker)
6. Complete the following calculation (2 points):

$$15.78 g-8.788 g=6.992 g=6.99 g$$

Quiz 1B

1. Rank the following numbers from greatest to least (6 points):

0.00034, 9.87 x 10-2, 1.23 x 106, 5.67 x 102, 0.234 x 106, 4560

* 1. 106 > 0.234 x 106 > 4560 > 5.67 x 102 > 9.87 x 10-2 > 0.00034
1. Are the following statements true (T) or false (F) (2 points)?
	1. Use weighing paper, weighing boats, or other containers on \_\_T\_\_

the balance pan.

* 1. Beakers and Erlenmeyer flasks are useful for measuring volumes. \_\_F\_\_
1. Using dimensional analysis convert 15.3 Ms to days (Mega = M = 106) (6 points).

$$15.3 Ms×\frac{10^{6} s}{1 Ms}×\frac{1 min}{60 s}×\frac{1 hr}{60 min}×\frac{1 day}{24 hrs}=177.083333 days=177 days$$

1. Identify each of the following activities in the scientific method as an observation (O), a hypothesis (H), an experiment (E), law (L), or a theory (T) (2 points).
	1. Explains how nature behaves the way it does. \_\_L\_\_
	2. Design an experimental plan that will give new information \_\_E\_\_

about a problem.

1. Complete the following calculation (2 points):

$$87.58 mL+5.1 mL=92.67 mL=92.7 mL$$

1. What topic in this class are you most looking forward to learning about (2 points)?
2. How many significant figures are in the following (2 points):
3. 0.61 \_\_\_2\_\_\_
4. 453.2 \_\_\_4\_\_\_