

**Honors Chem WKS**  
**Significant Figures in Calculations**

NAME \_\_\_\_\_  
Period \_\_\_\_\_ Date \_\_\_\_\_

**A. Rounding**

Round each of the following to 3 significant figures.	Round each of the following to 4 significant figures.
1) 98.473 m	2) 4.59812 mm
3) 0.00076321 mm	4) 0.0094249 g
5) 57.048 g	6) 20.498 kg
7) 12.15 g	8) $6.82035 \times 10^3$ L
9) $7.49830 \times 10^{-4}$ mm	10) 45,698 km (be careful!)
11) 874.5 °C	12) 0.31995 mg

**B. Calculations**

Give the results of the following problems. First show the full answer in your calculator, then round to the correct number of significant figures. Be sure to include the proper units! Units can be multiplied or divided, but in addition and subtraction all units and exponents must be the same and the answer is in the same units. Indicate how you are rounding (# of SF or decimal place).

Ex.  $85.8 \text{ mm} \times 207.9 \text{ mm} = 17837.82 \text{ mm}^2 \rightarrow 17300 \text{ mm}^2$  (3 SF)

13)  $12.8 \text{ m} \times 5.2 \text{ m} =$

14)  $100 \text{ pencils} \times 8.57 \text{ g/pencil} =$

15)  $0.00005 \text{ cm} \times 538 \text{ cm}^2 =$

16)  $6008 \text{ cm}^3 \div 8.724 \text{ cm} =$

17)  $72 \text{ cm} \div 7 \text{ rods} =$

18)  $600 \text{ g} \div 38 \text{ mL} =$

19)  $357.89 \text{ g} + 0.002 \text{ g} =$

20)  $17.95 \text{ m} + 32.42 \text{ m} + 50 \text{ m} =$

21)  $5.5 \text{ mL} + 3.7 \text{ mL} + 2.97 \text{ mL} =$

22)  $84.675 \text{ cm} - 3 \text{ cm} =$

23)  $75 \text{ °C} - 2.55 \text{ °C} =$

24)  $10 \text{ g} - 9.9 \text{ g} =$