

Subject: AP Chemistry

Grade: 11

Lesson: 3

Book reference: Unit



Significant Figures Practice Sheet 1

Practice Problems — Counting Significant Figures in a Measured Value

1. How many significant figures are in each of the following measured values?

(a) 425 mL _____

(d) 1.50×10^4 L _____

(b) 590.50 g _____

(e) 3400 m _____

(c) 0.00750 s _____

2. Round the following measurements to the stated number of significant figures.

(a) 30.54 s (3 sig figs) _____

(c) 4.49 m (2 sig figs) _____

(b) 0.2895 g (3 sig figs) _____

(d) 100.4°C (2 sig figs) _____

Multiplication and Division in Significant Figures.

Quick Check

Give the answer to each of the following problems with the appropriate unit and the correct number of significant figures:

1. $0.14 \text{ m} \times 14.00 \text{ m} =$ _____

2. $940 \text{ g} \div 0.850 \text{ mL} =$ _____

3. $0.054 \text{ g} \div 1.10 \text{ s} =$ _____

Addition and Subtraction in Significant Figures.

Practice Problems— Significant Figures in Addition and Subtraction Calculations

Give the answer to each of the following problems with the correct number of significant figures:

1. $16.407 \text{ mL} + 5.70 \text{ mL} =$ _____

2. $0.32 \text{ g} + 0.009 \text{ g} =$ _____

3. $750 \text{ m} + 8.001 \text{ m} =$ _____