

Chpt 2 rev 2b

Another Great Review

Hint: When no uncertainty is listed with a measurement you have to assume that the estimated value is in 10 divisions!

Round the following measurements to the number of sig. figs. listed:

1. (3) 3.145 m 2. (1) 9.80665 m/s² 3. (2) 9.9634 m
4.. (1) 57 km 5. (4) 0.00234517 mm 6. (3) 80966 g

Perform the following operations using sig. Figs.:

7. 44.98 g + 6.9 g = 8. 1.235 kg x 0.8 m/s =
9. 0.9965 N x 1.2 s = 10. 0.02 m/s divided by 2.35 m/s =
11. 35.5 ml – 1.7 cl = 12. 0.237 kg + 2.5 g + 135 mg =

List the uncertainty of each measurement and % of each:

13. 9.80665 m/s 20. 186,000 miles/s

List the uncertainty of each operation and % of each:

14. Volume of a ball if its radius is 2.3×10^{-1} m? ($V = \frac{4}{3} \pi r^3$) (use 3.14 for π)

15. Density of a sample of “goop”? (Density = m/V) List answer in kg/m³ and g/cm³
m = 3.45 kg V = 0.845 m³ ($1\text{m}^3 = 1 \times 10^6 \text{cm}^3$)

16. Put the following Measurements into Standard Scientific Notation:

0.00456 =
13.3 g =

93,000,000 miles=
0.78 kg=

3.45 m=
100.0 kg=