

Ch 2 Review

Name:

1. Describe what each step of the scientific method is used for
 - a. Problem
 - b. Gathering Information
 - c. Hypothesis
 - d. Experiment
 - e. Collect Data
 - f. Analyze Data
 - g. Conclusion
 - h. Re Test
2. What is the difference between a theory and a law?
3. Describe the difference between accuracy and precision.
4. Draw three dart boards. On the first draw an accurate dart, on the second draw three precise darts, and on the third draw three darts that are neither accurate nor precise.

5. How many significant figures does each number have?
- 45.62 g
 - 0.003200 km
 - 2000 lbs
 4000. Tons
 - 6 butterflies
 - 34010 acres
 - 500 left shoes
 - 4.56×10^{287} fm
 - 1.0×10^2 yd
 - 9236 hula hoops
6. Write each number in scientific notation.
- .000987 in
 - 100400 g
 - .01456 J
 - 121 L
 - 1,000,000,000 trees
 - .000003406 m
 - .5670 μm
7. Write the answer with the correct number of significant figures.
- $34.54 \text{ m} \times 20,000 \text{ m} \times .01264 \text{ m} =$
 - $486.67 \text{ g} / 100.0 \text{ ml} =$
 - $5000 \text{ kg} / 205 \text{ L} =$
 - $.0035 \text{ cm} \times .0708 \text{ cm} \times 26.873 \text{ cm} =$

1 kL = 1000 L
1 L = 100 cL
1 L = 1000 mL
1 cL = 10 mL
1 L² = 1,000,000 mL²
(Good for g, m, L)

60 s = 1 min
60 min = 1 hr
24 hr = 1 day
365 day = 1 yr

1.637 km = 1 mi
1 mL = 1 cm³
1 J = .239 cal
1 gal = 3.786 L
1 lb = 454 g

8. Convert 267 cg to mg

9. Convert 570309 mL to kL

10. Convert 10 mi to mm

11. Convert 67.003g/ml to lbs/gal

12. Convert 2.98×10^6 cal/lb to J/g

CONVERSION WORD PROBLEM

13. On your 98th birthday you decide to go **bungee jumping**. Jumping off the bridge you think to yourself *Did I attach my bungee cord?* (Something many old people think to themselves at one point or another in their lives due to their aging minds). This is the last thought you ever have as you land directly on a grizzly bear and die. You slammed into that large bear at exactly 12:00:00 (noon) on your birthday. How many seconds from your birth till you created road kill of that grizzly bear did you live? (True story or is it?)