

## Chapter 8: Diagnostic Test

Name \_\_\_\_\_  
\_\_\_\_\_

The purpose of this test is to see how well you know metric weights and measures as well as converting metric to English and English to metric units. We recommend that you work this diagnostic test *before* your instructor tests you on this chapter. Allow yourself about fifty minutes to do this test.

Complete solutions for all the problems on this test, together with section references, are given in the Answer Section. You should study the sections referred to for the problems you do incorrectly.

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In Problems 1-17, fill in the missing numbers. Consider all given numbers to be exact.

1. 5.24 m = \_\_\_\_\_ cm

2. 25 kg = \_\_\_\_\_ lb

3. 500 cc = \_\_\_\_\_ ml = \_\_\_\_\_ l

4. 100 km = \_\_\_\_\_ mi

5. 7.42 qt = \_\_\_\_\_ l

6. 100 ha = \_\_\_\_\_ acres

7. 870 g = \_\_\_\_\_ kg

8.  $35^{\circ}\text{C} = \text{_____ } ^{\circ}\text{F}$   $\left(F = \frac{9}{5}C + 32\right)$

9. 1,260 cm = \_\_\_\_\_ m

10. 42.5 kl = \_\_\_\_\_ l

11. 1,075 mg = \_\_\_\_\_ g

12. 1.65 l = \_\_\_\_\_ ml = \_\_\_\_\_ cc

13. 1.3 m = \_\_\_\_\_ mm

14. 5 lb = \_\_\_\_\_ g

15. 5,094 m. = \_\_\_\_\_ km

16.  $77^{\circ}\text{F} =$  \_\_\_\_\_  $^{\circ}\text{C}$   $\left(C = \frac{5}{9}[F - 32]\right)$

17. 20 in = \_\_\_\_\_ cm

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18. A Mexican speed sign reads  $\textcircled{50}$ . This is understood to be in kilometers per hour. What is this speed limit in miles per hour? (Round off to nearest mile per hour.)

(18) \_\_\_\_\_

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19. A prescription calls for taking 650 mg of aspirin per day. How many grams would this be per week?

(19) \_\_\_\_\_

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20. Express the length of a 10-foot board in meters. Round off your answer to the nearest tenth of a meter.

(20) \_\_\_\_\_