

Exercises

Fill in the blank with the appropriate metric unit.

1. 1000 g = 1 _____
2. 0.01 m = 1 _____
3. 100 l = 1 _____
4. 0.001 g = 1 _____
5. 10 m = 1 _____
6. 0.1 l = 1 _____
7. 100 g = 1 _____
8. 0.001 m = 1 _____
9. 0.001 l = 1 _____
10. 1000 m = 1 _____

Fill in the blank with the equivalent measurement in the given length unit.

11. 34 m = _____ cm
12. 5.8 dm = _____ hm
13. 9003 mm = _____ m
14. 4802 cm = _____ km
15. 0.004 hm = _____ dm
16. 0.035 dam = _____ mm
17. 0.153 m = _____ km
18. 340 km = _____ m

Fill in the blank with the equivalent measurement in the given mass unit.

19. 0.0044 g = _____ mg
20. 58006 g = _____ kg
21. 34.98 cg = _____ mg
22. 52.7 dg = _____ g
23. 84 kg = _____ g
24. 9.0103 g = _____ dg
25. 0.00205 mg = _____ cg
26. 0.0004501 kg = _____ mg

Fill in the blank with the equivalent measurement in the given volume unit.

27. 459 ml = _____ l

28. 2 l = _____ dl
29. 0.042 kl = _____ l
30. 5 ml = _____ dl
31. 79.42 hl = _____ cl
32. 0.012 ml = _____ l
33. 0.00000407 kl = _____ ml
34. 0.24107 dal = _____ ml

Which metric length unit (kilometer, meter, centimeter or millimeter) would be most appropriate for measuring each of the following lengths?

35. The diameter of a quarter
36. The width of our classroom
37. The distance from Houston to Austin
38. The width of a strand of hair
39. The length of your Cougar 1 Card
40. Your height

Which metric mass unit (metric tonne = 1000 kg, kilogram, gram, milligram) would be most appropriate for measuring each of the following masses?

41. The mass of a pencil
42. The mass of a newborn child
43. The mass of a small apple
44. The mass of a full grown elephant
45. The mass of a dose of medicine
46. The mass of your car

Which metric volume unit (kiloliter, liter, deciliter, milliliter) would be most appropriate for measuring the volume of the following objects?

47. A can of soda
48. The gas tank of a car
49. A swimming pool
50. A dose of medicine
51. A carton of milk.
52. A glass of juice

Exercise Set 1.6 - Systems of Measurement

53. The diameter of a dime is approximately
- (a) 2 mm (b) 20 dm
(c) 2 m (d) 2 cm
(e) 0.02 km.
54. The length of a football field is approximately
- (a) 9 m (b) 90 m
(c) 900 cm (d) 900 mm
(e) 0.9 km.
55. The mass of a healthy newborn child could be approximately
- (a) 3.5 g (b) 3.5 kg
(c) 0.35 kg (d) 35 g
(e) 3500 mg
56. The mass of a raisin is approximately
- (a) 1 g (b) 1 mg
(c) 1 kg (d) 100 g
(e) 0.01 g
57. The mass of a regular size candy bar is about
- (a) 2.8 kg (b) 2.8 mg
(c) 2.8 g (d) 28 g
(e) 28 cg
58. The mass of a box of cereal is approximately
- (a) 500 mg (b) 500 kg
(c) 500 g (d) 5 kg
(e) 5 dg
59. The volume of a teaspoon of medicine is approximately
- (a) 5 dl (b) 5 ml
(c) 5 l (d) 5 kl
(e) 5 hl
60. The volume of a can of soda is
- (a) 355 ml (b) 355 dl
(c) 3.55 l (d) 0.355 kl
(e) 3.55 ml
61. The weatherman reports that the current temperature is $15^{\circ}C$. Which of the following would be the most appropriate clothing choice?
- (a) A heavy winter coat.
(b) Several layers of sweaters for cold weather.
(c) A long-sleeve shirt or light sweater for the cool breeze.
(d) Your favorite summer shorts outfit for a hot afternoon.
62. The weatherman reports that the current temperature is $35^{\circ}C$. Which of the following would be the most appropriate clothing choice?
- (a) A heavy winter coat.
(b) Several layers of sweaters for cold weather.
(c) A long-sleeve shirt or light sweater for the cool breeze.
(d) Your favorite summer outfit for a hot afternoon.

Convert the following temperatures in degrees Celsius to degrees Fahrenheit.

63. $-4^{\circ}C$
64. $5^{\circ}C$
65. $40^{\circ}C$
66. $72^{\circ}C$

Exercise Set 1.6 - Systems of Measurement

- 67. $80^{\circ}C$
- 68. $200^{\circ}C$
- 69. $150^{\circ}C$
- 70. $350^{\circ}C$

Convert the following temperatures in degrees Fahrenheit to degrees Celsius.

- 71. $0^{\circ}F$
- 72. $20^{\circ}F$
- 73. $48^{\circ}F$
- 74. $72^{\circ}F$
- 75. $90^{\circ}F$
- 76. $100^{\circ}F$
- 77. $300^{\circ}F$
- 78. $400^{\circ}F$

79. A rectangular piece of plywood is 60 cm wide by 2.2 m long. Find its area in square meters.

80. A rectangular field is 0.45 km wide and 1.04 m long.

- (a) Find the area of the field in square kilometers.
- (b) Find the area of the field in square meters.

81. A city block is a square with sides of length 0.15 km.

- (a) Find the area of the block in square kilometers.
- (b) Find the area of the block in square meters.

82. Find the area, in square meters, of a circle with a radius of 5.75 m.

83. A moving box is 350 cm wide by 450 cm long by 250 cm high.

- (a) Find the volume of the box in cubic centimeters.
- (b) Find the volume of the box in cubic meters.

84. A shipping crate is a cube with sides of length 3.34 m. Find the volume of the crate in cubic meters.

85. A cylindrical can has height 0.55 m and radius 40 cm.

- (a) Find the volume of the can in cubic centimeters.
- (b) Find the volume of the can in cubic meters.

86. A cylindrical can has height 12 cm and radius 7.5 cm. Find the volume of the can in cubic centimeters.