

ANSWER KEY

Worksheet answers

Grades 6–8 · 27 questions. Each line gives the answer, then the one-line working. Round your final answer to the nearest tenth (one decimal place). Use the exact factors on the chart; do not round them first.

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A. Metric decimals

- 1 11,790 mL**
11.79 L: 3 steps down, decimal 3 places right = 11,790 mL
- 2 75,400 g**
75.4 kg: 3 steps down, decimal 3 places right = 75,400 g
- 3 0.0719 L**
71.9 mL: 3 steps up, decimal 3 places left = 0.0719 L
- 4 21,300 mg**
21.3 g: 3 steps down, decimal 3 places right = 21,300 mg
- 5 0.898 m**
898 mm: 3 steps up, decimal 3 places left = 0.898 m
- 6 59,280 mm**
59.28 m: 3 steps down, decimal 3 places right = 59,280 mm

B. US customary and metric

- 7 41.8 km**
26 mi $\times$ 1.609344 km/1 mi $\approx$ 41.8 km
- 8 6.2 mi**
10 km $\times$ 1 mi/1.609344 km $\approx$ 6.2 mi
- 9 164.0 ft**
50 m $\times$ 1 ft/0.3048 m $\approx$ 164.0 ft
- 10 56.8 L**
15 gal $\times$ 3.785411784 L/1 gal $\approx$ 56.8 L
- 11 45.7 m**
50 yd $\times$ 0.9144 m/1 yd $\approx$ 45.7 m
- 12 26.5 oz**
750 g $\times$ 1 oz/28.349523125 g $\approx$ 26.5 oz
- 13 13.2 gal**
50 L $\times$ 1 gal/3.785411784 L $\approx$ 13.2 gal
- 14 22.0 lb**
10 kg $\times$ 1 lb/0.45359237 kg $\approx$ 22.0 lb

- 15 16.9 fl oz**
500 mL $\times$ 1 fl oz/29.5735295625 mL $\approx$ 16.9 fl oz
- 16 9.8 in**
25 cm $\times$ 1 in/2.54 cm $\approx$ 9.8 in

C. Temperature

- 17 14 °F**
Multiply by 9/5, then add 32: $-10 \times 9/5 + 32 = 14$ °F.
- 18 20 °C**
Subtract 32, then multiply by 5/9: $(68 - 32) \times 5/9 = 36 \times 5/9 = 20$ °C.
- 19 15 °C**
Subtract 32, then multiply by 5/9: $(59 - 32) \times 5/9 = 27 \times 5/9 = 15$ °C.
- 20 40 °C**
Subtract 32, then multiply by 5/9: $(104 - 32) \times 5/9 = 72 \times 5/9 = 40$ °C.

D. Mixed units

- 21 2,100 mL**
1.5 L = 1,500 mL; 1,500 + 600 = 2,100 mL
- 22 3,650 m**
3.4 km = 3,400 m; 3,400 + 250 = 3,650 m
- 23 1,250 g**
1.5 kg = 1,500 g; 1,500 – 250 = 1,250 g

E. Word problems

- 24 3.7 m**
12 ft $\times$ 0.3048 m/1 ft $\approx$ 3.7 m
- 25 4.25 L**
5 L – 750 mL = 5,000 mL – 750 mL = 4,250 mL = 4.25 L
- 26 2.3 kg**
5 lb $\times$ 0.45359237 kg/1 lb $\approx$ 2.3 kg
- 27 5,900 m**
5.9 km $\times$ 1000 = 5,900 m