ALLUNITCONVERSIONS · PRINTABLE WORKSHEET

Metric Conversion Worksheet

Length, mass and capacity: millimetres, centimetres, metres, kilometres, grams, kilograms and litres

Level: Ages 9–12 · Grades 4–7 · Years 5–8

allunitconversions.com/conversion-worksheets
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Name _____ Class _____ Date _____ Score _____ / 20

Convert each measurement and write the answer on the line. To change to a smaller unit, multiply; to change to a larger unit, divide.

REFERENCE

1 km = 1000 m	1 m = 100 cm	1 cm = 10 mm	1 m = 1000 mm
1 kg = 1000 g	1 g = 1000 mg	1 t = 1000 kg	1 L = 1000 mL

WORKED EXAMPLE

2.4 m = ? cm → 2.4 × 100 = 240 → **240 cm**

Part A: to a smaller unit (multiply)

1. 90.3 km = _____ m

2. 47.9 m = _____ cm

3. 1.8 cm = _____ mm

4. 96.5 m = _____ mm

5. 6.5 kg = _____ g

6. 89.3 g = _____ mg

7. 0.6 t = _____ kg

8. 5.2 L = _____ mL

Part B: to a larger unit (divide)

9. 546.3 m = _____ km

10. 8081 cm = _____ m

11. 127.4 mm = _____ cm

12. 17.6 mm = _____ m

13. 582.7 g = _____ kg

14. 290.6 mg = _____ g

15. 15.4 kg = _____ t

16. 67.7 mL = _____ L

Part C: two steps (challenge)

17. 0.65 km = _____ cm

18. 75,650 cm = _____ km

19. 8.16 kg = _____ mg

20. 686,500 mm = _____ km

Every answer is exact: no rounding is needed. Answer key on page 2. More worksheets and the matching charts: allunitconversions.com/conversion-worksheets

Answer key — Metric Conversion Worksheet

For teachers · remove before handing out

#	Question	Answer	Working
PART A: TO A SMALLER UNIT (MULTIPLY)			
1	90.3 km → m	**90,300 m**	90.3 × 1000 = 90,300
2	47.9 m → cm	**4790 cm**	47.9 × 100 = 4790
3	1.8 cm → mm	**18 mm**	1.8 × 10 = 18
4	96.5 m → mm	**96,500 mm**	96.5 × 1000 = 96,500
5	6.5 kg → g	**6500 g**	6.5 × 1000 = 6500
6	89.3 g → mg	**89,300 mg**	89.3 × 1000 = 89,300
7	0.6 t → kg	**600 kg**	0.6 × 1000 = 600
8	5.2 L → mL	**5200 mL**	5.2 × 1000 = 5200
PART B: TO A LARGER UNIT (DIVIDE)			
9	546.3 m → km	**0.5463 km**	546.3 ÷ 1000 = 0.5463
10	8081 cm → m	**80.81 m**	8081 ÷ 100 = 80.81
11	127.4 mm → cm	**12.74 cm**	127.4 ÷ 10 = 12.74
12	17.6 mm → m	**0.0176 m**	17.6 ÷ 1000 = 0.0176
13	582.7 g → kg	**0.5827 kg**	582.7 ÷ 1000 = 0.5827
14	290.6 mg → g	**0.2906 g**	290.6 ÷ 1000 = 0.2906
15	15.4 kg → t	**0.0154 t**	15.4 ÷ 1000 = 0.0154
16	67.7 mL → L	**0.0677 L**	67.7 ÷ 1000 = 0.0677
PART C: TWO STEPS (CHALLENGE)			
17	0.65 km → cm	**65,000 cm**	0.65 × 100,000 = 65,000
18	75,650 cm → km	**0.7565 km**	75,650 ÷ 100,000 = 0.7565
19	8.16 kg → mg	**8,160,000 mg = 8.16 × 10^6 mg**	8.16 × 1,000,000 = 8,160,000
20	686,500 mm → km	**0.6865 km**	686,500 ÷ 1,000,000 = 0.6865

Teaching notes: common mistakes

- Moving the decimal point the wrong way. A smaller unit always needs a bigger number: 3.5 km is 3500 m, not 0.0035 m.
- Mixing up the factors: 1 m = 100 cm, but 1 cm = 10 mm and 1 m = 1000 mm.
- Forgetting that 1 tonne is 1000 kg, the same step as kilograms to grams.

Every answer is exact: no rounding is needed. Every answer is calculated from the exact definitions and checked against the AllUnitConversions conversion engine before the PDF is produced. Matching reference chart: **allunitconversions.com/metric-conversion-chart**. Free to print, copy and share with attribution (CC BY 4.0).