

Metric Conversions Worksheet

Name: Key

Single Unit Conversions:

1. 165 g = 0.165 kg

2. 360 mm = 0.36 m

3. 9 kg = 9×10^5 cg

4. 5.8 cm = 58 mm

5. 0.007 s = 0.07 ds

6. 700 L = 7×10^{-4} ML

7. 7.0 hL = 7.0×10^2 L

8. 12 μ g = 1.2×10^{-6} dag

9. 2 kg = 2×10^5 cg

10. 0.165 Mg = 1.65×10^4 dag

11. 7.0 mg = 7.0×10^3 μ g

12. 5.8 hL = 5.8×10^5 mL

13. 4.25 dL = 0.0425 daL

14. 9.62 ms = 9.62×10^{-6} ks

Double Unit Conversions:

15. 1.42 g/L = 1.42×10^5 mg/hL

$$\frac{1.42 \text{ g} \mid 10^2 \text{ L} \mid 10^3 \text{ mg}}{\text{L} \mid 1 \text{ hL} \mid 1 \text{ g}}$$

16. 0.0056 kg/dL = 56 g/L

$$\frac{0.0056 \text{ kg} \mid 10^1 \text{ dL} \mid 10^3 \text{ g}}{\text{dL} \mid 1 \text{ L} \mid 1 \text{ kg}} =$$

17. 1.3×10^{-8} Mm/s = 0.013 mm/ms

$$\frac{1.3 \times 10^{-8} \text{ Mm} \mid 1 \text{ s} \mid 10^9 \text{ mm}}{\text{s} \mid 10^3 \text{ ms} \mid 1 \text{ Mm}}$$

18. 2.34×10^9 μ g/mL = 2.34×10^4 kg/daL

$$\frac{2.34 \times 10^9 \text{ } \mu\text{g} \mid 10^4 \text{ mL} \mid 1 \text{ kg}}{\text{mL} \mid 1 \text{ daL} \mid 10^9 \text{ } \mu\text{g}}$$

19. 8.4 cg/cL = 8.4×10^6 g/ML

$$\frac{8.4 \text{ cg} \mid 10^8 \text{ cL} \mid 1 \text{ g}}{\text{cL} \mid 1 \text{ ML} \mid 10^2 \text{ cg}}$$

20. 0.0001 hm/s = 1×10^{-5} m/ms

$$\frac{0.0001 \text{ hm} \mid 1 \text{ s} \mid 10^2 \text{ m}}{\text{s} \mid 10^3 \text{ ms} \mid 1 \text{ hm}}$$