

## Metric Conversions Worksheet

Name: Key.

### *Single Unit Conversions:*

1. 165 g = 0.165 kg

2. 360 mm = 0.36 m

3. 9 kg =  $9 \times 10^5$  cg

4. 5.8 cm = 58 mm

5. 0.007 s = 0.07 ds

6. 700 L =  $7 \times 10^{-4}$  ML

7. 7.0 hL =  $7.0 \times 10^2$  L

8. 12  $\mu$ g =  $1.2 \times 10^{-6}$  dag

9. 2 kg =  $2 \times 10^5$  cg

10. 0.165 Mg =  $1.65 \times 10^4$  dag

11. 7.0 mg =  $7.0 \times 10^3$   $\mu$ g

12. 5.8 hL =  $5.8 \times 10^5$  mL

13. 4.25 dL = 0.0425 daL

14. 9.62 ms =  $9.62 \times 10^{-6}$  ks

### *Double Unit Conversions:*

15. 1.42 g/L =  $1.42 \times 10^5$  mg/hL

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

16. 0.0056 kg/dL = 56 g/L

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

17.  $1.3 \times 10^{-8}$  Mm/s = 0.013 mm/ms

$$\frac{1.3 \times 10^{-6} \text{ Mm}}{\text{s}} \left| \frac{1 \text{ s}}{10^3 \text{ ms}} \right| \frac{10^9 \text{ mm}}{1 \text{ Mm}}$$

18.  $2.34 \times 10^9$   $\mu$ g/mL =  $2.34 \times 10^4$  kg/daL

$$\frac{2.34 \times 10^9 \text{ } \mu\text{g}}{\text{mL}} \left| \frac{10^6 \text{ mL}}{1 \text{ daL}} \right| \frac{1 \text{ kg}}{10^9 \text{ } \mu\text{g}}$$

19. 8.4 cg/cL =  $8.4 \times 10^6$  g/ML

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

20. 0.0001 hm/s =  $1 \times 10^{-5}$  m/ms

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