

### METRIC CONVERSIONS

V. Fill in the blanks with the correct metric equivalent.

- |                     |                      |                      |
|---------------------|----------------------|----------------------|
| 1. 1000 g = 1 _____ | 4. 10 g = 1 _____    | 7. 10.0 m = 1 _____  |
| 2. 0.1 g = 1 _____  | 5. 0.001 g = 1 _____ | 8. 1000 m = 1 _____  |
| 3. 100 g = 1 _____  | 6. 0.01 g = 1 _____  | 9. 0.001 m = 1 _____ |

VI. Convert the following metric numbers. (Remember: DO NOT drop final zeroes from your numbers.)

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|-------------------------------------|------------------------------------|
| 10. 20 mg = _____ g                 | 23. 0.89 mm = _____ m              |
| 11. 23,456 g = _____ kg             | 24. 0.005 m = _____ mm             |
| 12. 14 g = _____ cg                 | 25. 1.14 L = _____ cm <sup>3</sup> |
| 13. 2.3 mg = _____ g                | 26. 15 mL = _____ cm <sup>3</sup>  |
| 14. 70 cg = _____ g                 | 27. 1.40 cL = _____ cc             |
| 15. 45 g = _____ mg                 | 28. 0.015 hL = _____ L             |
| 16. 2.6 kg = _____ g                | 29. 8.2 mL = _____ L               |
| 17. 0.5 g = _____ dg                | 30. 2,000 kg = _____ g             |
| 18. 0.004 kg = _____ g              | 31. 0.053 g = _____ mg             |
| 19. $1 \times 10^3$ m = _____ km    | 32. 0.0512 cg = _____ kg           |
| 20. $1 \times 10^{-3}$ m = _____ mm | 33. 101.53 cg = _____ g            |
| 21. 55 m = _____ cm                 | 34. 540,000 mg = _____ g           |
| 22. 4.5 cm = _____ mm               | 35. 45,000 cm = _____ km           |

VII. Solve the following equations. Be sure to convert all units to the same base! Show your work.

36.  $16 \text{ g} - 50 \text{ mg} =$  \_\_\_\_\_ g
37.  $0.017 \text{ L} - 17 \text{ mL} =$  \_\_\_\_\_ mL
38.  $320 \text{ mm} + 5.4 \text{ cm} + 1.689 \text{ m} =$  \_\_\_\_\_ m
39.  $53 \text{ cm} + 3 \text{ m} =$  \_\_\_\_\_ mm
40.  $0.054 \text{ g} - 54 \text{ mg} =$  \_\_\_\_\_ g