

## Scientific Notation and Unit Prefixes

*Make the following conversions:*

- |                               |                                |
|-------------------------------|--------------------------------|
| 1) 3.4 liters to milliliters  | 6) 45 meters to centimeters    |
| 2) 876 millimeters to meters  | 7) 11.7 grams to kilograms     |
| 3) 78,999 milligrams to grams | 8) 0.0009 kiloliters to liters |
| 4) 0.9 centigrams to grams    | 9) 44 centimeters to meters    |
| 5) 112 meters to millimeters  | 10) 277 kilograms to grams     |

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*Convert the following to scientific notation:*

- 11) 45,700 \_\_\_\_\_
- 12) 0.009 \_\_\_\_\_
- 13) 23 \_\_\_\_\_
- 14) 0.9 \_\_\_\_\_
- 15) 24,212,000 \_\_\_\_\_
- 16) 0.000665 \_\_\_\_\_

Convert the following to scientific notation:

17) 21.9 \_\_\_\_\_

18) 0.00332 \_\_\_\_\_

19) 321 \_\_\_\_\_

20) 0.119 \_\_\_\_\_

21) 1492 \_\_\_\_\_

22) 0.2713 \_\_\_\_\_

23) 314159 \_\_\_\_\_

24) 6022 \_\_\_\_\_

25) 0.12011 \_\_\_\_\_

Convert the following numbers in scientific notation to expanded form:

26)  $3.825 \times 10^3$  \_\_\_\_\_

27)  $6.3 \times 10^4$  \_\_\_\_\_

28)  $2.3 \times 10^{-2}$  \_\_\_\_\_

29)  $4.44 \times 10^{-6}$  \_\_\_\_\_

30)  $7.121 \times 10^9$  \_\_\_\_\_

31)  $1.2 \times 10^{-1}$  \_\_\_\_\_

32)  $1.8 \times 10^2$  \_\_\_\_\_

33)  $8.1 \times 10^{-4}$  \_\_\_\_\_

34)  $6.7 \times 10^5$  \_\_\_\_\_

35)  $3.4 \times 10^7$  \_\_\_\_\_