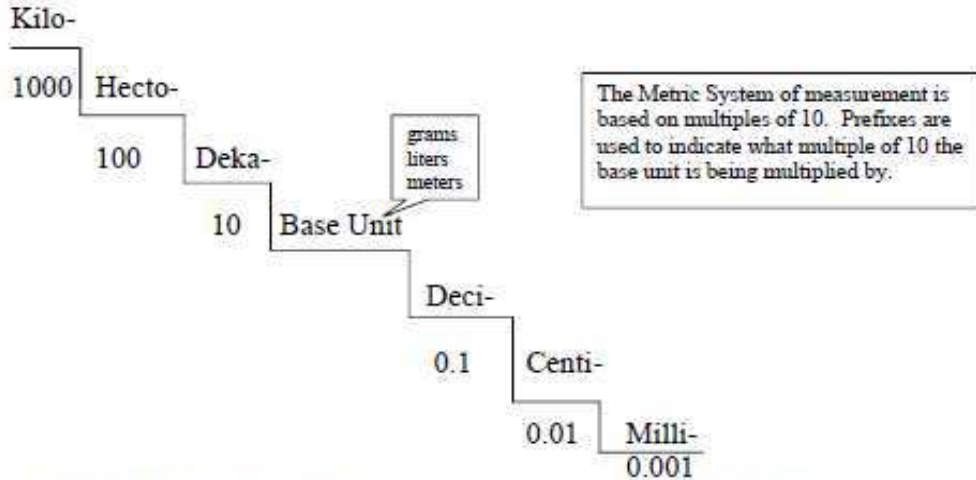


Metric Conversion Worksheet – Answer Key



The Metric System of measurement is based on multiples of 10. Prefixes are used to indicate what multiple of 10 the base unit is being multiplied by.

The prefix Kilo (k) - means 1000 times.
The prefix Hecto (h) - means 100 times.
The prefix Deka (dk) - means 10 times.
The prefix Deci (d) - means 0.1 times.
The prefix Centi (c) - means 0.01 times.
The prefix Milli (m) - means 0.001 times.

Base Units will include the gram (g), liter (L), and meter (m) and will have no prefix.

To use the Stair-Step method, find the prefix the original measurement starts with. (ex. *milligram*) If there is no prefix, then you are starting with a base unit. Find the step which you wish to make the conversion to. (ex. *decigram*) Count the number of steps you moved, and determine in which direction you moved (left or right). The decimal in your original measurement moves the same number of places as steps you moved and in the same direction. (ex. *milligram* to *decigram* is 2 steps to the left, so 40 *milligrams* = .40 *decigrams*) If the number of steps you move is larger than the number you have, you will have to add zeros to hold the places. (ex. *kilometers* to *meters* is three steps to the right, so 10 *kilometers* would be equal to 10,000 *meters*)
That's all there is to it! You need to be able to count to 6, and know your left from your right!

1. 256 m = 25,600 cm
2. 97.25 cm = 972.5 mm
3. 952 g = 952,000 mg
4. .574 m = 574 cm
5. 5.287 l = 5,287 ml
6. 785.3 km = 785,300 m
7. 84.363 km = 8,436,300 cm
8. 872 km = 872,000,000 mm
9. 95,824 cm = 958,240 mm
10. 8.26 kl = 8,260,000 ml
11. 36 mm = 3.6 cm
12. 857 cm = 8,570 mm
13. 8.52 mg = 0.00852 g
14. 86 g = 86,000 mg
15. 87.2 mm = 8.72 cm
16. 1 mm = 0.1 cm
17. 973.5 cm = 0.009735 km
18. .534 cm = 0.00534 m
19. 984 g = 0.984 kg
20. 8.64 m = 8640 mm
21. 64.3 ml = 64,300 l
22. 8.47 km = 8,470 m
23. 74,201 mm = 0.074201 km
24. .24 mg = 0.00000024 kg
25. 7.4 kl = 7,400 l
26. 874 m = 87,400 cm