

Dougherty Valley HS Chemistry
Metric System Worksheet

Name:
Date:
Period:

Directions: Perform the following conversion as indicated.

Length:

| | |
|-------------------|--------------------|
| 1. 70 cm to m = | 2. 49 cm to mm = |
| 3. 8 m to mm = | 4. 14.76 m to cm = |
| 5. 8500 cm to m = | 6. 20 mm to m = |

Volume and Mass:

| | |
|--------------------|---------------------|
| 7. 6 L to cl = | 8. 4.1 L to ml = |
| 9. 8.7 L to ml = | 10. 12.5 cl to L = |
| 11. 925 mg to Kg = | 12. 412.6 Kg to g = |

13. 8 cm x 7 cm x 6 m = _____ cm^3 also = _____ ml
14. 4 cm x 9 cm x 12 cm = _____ cm^3 also = _____ ml
15. 15 m x 12 cm x 5 cm = _____ cm^3 also = _____ ml

Convert: using Dimensional Analysis method (show your work)

16. 8000 g to Kg =
17. 25,000 g to Kg =
18. 2 mm to Km =
19. 12.42 Kg to g =
20. 4.2 g to mg =
21. One nickel weighs 5 grams. How many nickels are in 1 Kg of nickels?
22. What is the total mass of the following?

| | |
|----------|---------------------------------|
| Potatoes | 5 Kg |
| Flour | 11Kg |
| Turkey | 8000 g |
| Cereal | 250 g |
| Candy | 340 g |
| Medicine | 550 mg |
| Total: | _____ kg _____ mg _____ g |

| |
|-----------------------------|
| $1\text{cm}^3 = 1\text{ml}$ |
|-----------------------------|

23. The fundamental unit used to measure mass is _____.
24. What does the prefix "centi" mean? _____.
25. What does the prefix kilo mean? _____.

On the back of this sheet complete the following: **37 in/sec to miles/year**