Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_

Dimensional Analysis: Sage & Scribe

| **Weight/Mass**  1 kg = 2.2046 lbs  1 kg = 1000 g  1 g = 1000 mg  1 lb = 453.59 g  1 lb = 16 oz  1 ton = 2000 lbs  1 ton (metric) = 1000 kg | **Volume**  1 mL = 1 cm3  1000 mL = 1 L  1 gallon = 3.7854 L  1 L = 1.0567 quarts  1 gallon = 4 quarts = 8 pints  1 quart = 32 fluid ounces  1 pint = 2 cups = 480 mL | **Length/Distance**  1 kilometer = 0.6215 miles  1000 m = 1 km  1 inch = 2.54 cm  1 mile = 5280 feet  1 foot = 12 inches  1 yard = 3 feet  1 meter = 1.094 yards | **Time**  60 seconds = 1 minute  60 minutes = 1 hour  24 hours = 1 day  7 days = 1 week  365 days = 1 year  52 weeks = 1 year |
| --- | --- | --- | --- |

Scribe: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How many grams are in 1.5 kg?
2. How many gallons are in 0.567 L?
3. How many inches are in 3.8 ft?
4. How many hours are in 4579 seconds?
5. How many yards are in 49.0 inches?
6. How many cm3 are in 1.6 L?
7. How many inches are in 0.0067 km?
8. How many oz are in 300 mg?
9. How many gallons are in 30.1 cups?

Scribe: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How many feet are in 1.5 miles?
2. How many mL are in 4.50 cups?
3. How many mg are in 0.041 g?
4. How many oz are there in 3.00 kg?
5. How many hours are in 1.0 week?
6. How many meters are in 16 feet?
7. How many gallons are in 450.5 cm3?
8. How many mg are in 0.0078 metric tons?
9. How many minutes are in 12 weeks?

Answer key:

1. 1500 g
2. 0.150 gal
3. 46 in
4. 1.272 hrs
5. 1.36 yds
6. 1600 cm3
7. 160 in
8. 0.01 oz
9. 1.88 cups

1. 7900 ft
2. 1080 mL
3. 41 mg
4. 106 oz
5. 170 hrs
6. 4.9 ft
7. 0.1190 gal
8. 7,800,000 mg
9. 120,000 min