

Name: _____

Date: _____

Conversion Factors

Convert the following measurements using dimensional analysis. Show all steps.

1. 3.2 kilometers to centimeters

1 kilometer = 1,000 meters, 1 meter = 100 centimeters

2. 0.75 pounds to grams

1 pound = 16 ounces, 1 ounce = 28.35 grams

3. 1,200 milliliters to gallons

1 gallon = 3.785 liters, 1 liter = 1,000 milliliters

4. 250,000 milligrams to kilograms

1 gram = 1,000 milligrams, 1 kilogram = 1,000 grams

5. 20 feet to meters

1 foot = 12 inches, 1 inch = 2.54 centimeters, 1 meter = 100 centimeters

6. 7.5 inches to millimeters

1 inch = 2.54 centimeters, 1 centimeter = 10 millimeters

7. 0.5 tons to grams

1 ton = 2,000 pounds, 1 pound = 16 ounces, 1 ounce = 28.35 grams

1 milliliter = 1 cubic centimeter, 1 liter = 1,000 milliliters

Convert 1.50 m³ to liters.

Mass Conversions

1 ton = 2,000 pounds, 1 pound = 16 ounces, 1 ounce = 28.35 grams

Convert 7,500 g to kilograms.