

LESSON**7-4****Converting between Measurement Systems****Reteach**

Sometimes you have to convert measurements from one system of measurement to another. You can use this conversion chart to help you change from customary units to metric units.

Length	Mass	Capacity
1 inch = 2.54 centimeters 1 foot \approx 0.305 meter 1 yard \approx 0.914 meter 1 mile \approx 1.61 kilometers	1 ounce \approx 28.4 grams 1 pound \approx 0.454 kilogram	1 fluid ounce \approx 29.6 milliliters 1 quart \approx 0.946 liter 1 gallon \approx 3.79 liters

To change from inches to centimeters, multiply the number of inches by the factor in the chart: 1 inch = 2.54 centimeters.

$$8 \text{ inches} \times 2.54 = 20.32 \text{ centimeters}$$

Most conversions are approximate. This is shown by the symbol \approx .

Find each conversion factor in the chart.

- To convert from feet to meters, multiply by _____
- To convert from quarts to liters, multiply by _____
- To convert from pounds to kilograms, multiply by _____
- To convert from gallons to liters, multiply by _____

Use a conversion factor from the chart to change each measurement.

- 9 yards \approx _____ meters
- 4 ounces \approx _____ grams
- 12 fluid ounces \approx _____ milliliters
- 3 miles \approx _____ kilometers
- 24 pounds \approx _____ kilograms
- 7 gallons \approx _____ liters