Name _____

Metric Capacity Step-By-Step Lesson

Roberta drank 1.35 liters of water today.

How many milliliters of water did Roberta drink today?

Explanation:

- **Liters are the basic unit of liquid volume in the metric system.**
- **We know that 1 liter of liquid volume is equal to 1,000 milliliters.**
- **When working with conversion of units it is also best to set it up as a portion. Start with the known conversion.**

Step 1) We know that: 1 L = 1,000 mL

Step 2) Place the volume you are converting directly under the known conversion. Place it under the same unit of measure. In this case we have 1.35 L. We would there place the value under the liter volume in a proportion.

$$\frac{1\ L}{1.35\ L} = \frac{1{,}000\ mL}{}$$

Step 3) We are looking to find the value in units of milliliters. We can therefore complete the proportion setup by placing a variable (in this case we'll choose "x") under the mL column.

$$\frac{1\ L}{1.35\ L} = \frac{1{,}000\ mL}{x}$$

Step 4) Solve for x. Cross multiply and solve.

$$\frac{1\ L}{1.35\ L} = \frac{1{,}000\ mL}{x} \qquad x = 1{,}350\ mL$$