U.S./Metric Unit Conversions Guided Lesson Explanation

For each problem we will need to identify which units are available from the chart provided.

1. Reading the problem, we want to go from meters to feet. The chart provided us with this value: **1 m = 3.28084 ft.**

We can use that value in a simple proportion to find the new value.

1 m = 3.28084 ft.   Place the know value (3.2) under the unit (m) it is currently in.

3.2 m   x

1 m = 3.28084 ft.   Cross multiply

3.2 m   x

x = 10.498688   we can round it to **10.5 ft**.

2. Reading the problem, we want to go from gallons to ounces. The chart provided us with this value: **1 gal = 128 oz.**

1 gallon = 128 ounces

3 gallons   x

x = 384 ounces   We know that we have a total volume of 384 oz.

                        We have to find the number of cups we can fill with 384 oz.

1 cup = 8 ounces   We know each cup holds 8 ounces.

   X   384 ounces

384 = 8x

X = 48 cups

3. Reading the problem, we want to go from pounds to kilograms. The chart provided us with this value: 1 kg = 2.20462 lbs.

<u>1 kg</u> = <u>2.20462 lbs.</u>

   x   285 lbs.

$285 = 2.20462x$

$129.27397 = x$

We would say the final weight is 129 kg.