

Name: _____

1.

a) Order from lightest to heaviest: A gram, a kilogram, a tonne, an ounce, a pound, a ton

Gram, ounce, pound, Kilo, ton, tonne
Lightest Heaviest

b) Order from smallest to largest: A millilitre, a litre, a US fluid ounce, a US quart, a US gallon, a UK gallon

mL, ounce, litre, quart, US gallon, UK gallon
Smallest Largest

2. Convert

a) 2.9 kilograms into pounds

$$2.9 \frac{1 \text{ kg}}{2.2} = \frac{2.9 \text{ kg}}{x} \quad 6.38$$

b) $9\frac{3}{4}$ ounces into grams

$$\frac{1 \text{ ounce}}{28.35 \text{ g}} = \frac{9.75 \text{ ounce}}{x} \quad 276.41$$

3. Convert

a) 750 ml into US quarts

$$\frac{3.38 \text{ oz}}{100 \text{ mL}} = \frac{x}{750 \text{ mL}} \quad 25.3502$$

$$\frac{32 \text{ oz}}{1 \text{ qt}} = \frac{25.3502}{x \text{ qt}} \quad 0.79 \text{ quarts}$$

b) 5.2 US Gallons into litres

$$\frac{0.26 \text{ Gallons}}{1 \text{ Litre}} = \frac{5.2}{x} \quad 20 \text{ litres}$$

4. A litre of water weighs one kilogram. How many pounds would 50 US gallons of water weigh?

1 litre = how many US gallons? 0.26 ^{front table}
 1 kg = how many pounds? 2.2

so 0.26 gallons of water weigh 2.2 pounds

$$\frac{0.26 \text{ gallons}}{2.2 \text{ pounds}} = \frac{50 \text{ gallons}}{x \text{ pounds}}$$

$$2.2 \times 50 \div 0.26 = \underline{423.08 \text{ pounds}}$$

5. How much would an "(imperial) ton of money" be worth? A \$100 bill weighs 1.1 grams.

1.1g is how many ounces?

$$\frac{1 \text{ oz}}{28.35 \text{ g}} = \frac{x \text{ oz}}{1.1 \text{ g}}$$

\$100 weighs
 0.0388007 oz

$$\frac{\$100}{0.0388007 \text{ oz}} = \frac{\$x}{16 \text{ oz}}$$

← how much a
pound of bills
weighs is worth

$\$41,236.36945$

$$\frac{\$41,236.36945}{1 \text{ pound}} = \frac{\$x}{2000 \text{ pounds}}$$

1 ton of \$100 bills is worth $\$82,472,738.89$