

**Mass Conversion**

1. Convert 72 kilograms to pounds.

$$\begin{aligned}\frac{y}{72 \text{ kg}} &= \frac{1 \text{ lb}}{0.454 \text{ kg}} \\ \frac{y}{\cancel{72 \text{ kg}}} \times \cancel{72 \text{ kg}} &= \frac{1 \text{ lb}}{0.454 \cancel{\text{ kg}}} \times 72 \cancel{\text{ kg}} \\ y &= 158.6 \text{ lb}\end{aligned}$$

*There are approximately 158.6 pounds in 72 kilograms.*

2. Molly needs 15 grams of sugar for a cookie recipe. All of her measuring devices are in ounces. How many ounces of sugar does Molly need?

$$\begin{aligned}\frac{y}{15 \text{ g}} &= \frac{0.035 \text{ oz}}{1 \text{ g}} \\ \frac{y}{\cancel{15 \text{ g}}} \times \cancel{15 \text{ g}} &= \frac{0.035 \text{ oz}}{1 \cancel{\text{ g}}} \times 15 \cancel{\text{ g}} \\ y &= 0.5 \text{ oz}\end{aligned}$$

*There are approximately 0.5 ounces in 15 grams.*