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Objective:	To convert a measurement from a unit to another unit.
Measurement:	Mass
1 <sup>st</sup> . Given Unit	Customary unit (ounces)
To convert to:	Metric Unit (grams)
2 <sup>nd</sup> Given Unit:	Metric Unit (grams)
To convert to:	Customary Unit (ounces)
Container Used:	Garlic Powder Container



I need to convert 18 oz. to grams.

I know from the conversion tables that:

$$16 \text{ oz.} = 1 \text{ lb.}$$

$$1 \text{ lb.} = 453.59237 \text{ g}$$

For the first step of this conversion, I will be using the above information to convert 18 oz. to that amount in grams. I will be using the **unity fraction method** to set up my equation.

This is the **unity fraction method** setup.

$$\frac{18 \text{ oz}}{1} \times \frac{1 \text{ lb}}{16 \text{ oz}} \times \frac{453.59237 \text{ g}}{1 \text{ lb}}$$

$$= \frac{18 \times 453.59237}{16}$$

$$= \frac{8164.66266}{16}$$

$$= 510.2914163 \text{ g}$$

Rounding to the nearest whole number I get **510 grams**. This confirms that the conversion from ounces to grams was done correctly.

I will now convert 510 grams to that amount in ounces.

I know from the measurement tables that:

$$453.59237 \text{ g} = 1 \text{ lb.}$$

$$1 \text{ lb.} = 16 \text{ oz.}$$

For the first step of this conversion, I will be using the above information to convert 510 grams to that amount in ounces. I will be using the **unity fraction method** to set up my equation.

This is the **unity fraction method** setup.

$$\frac{510 \text{ g}}{1} \times \frac{1 \text{ lb.}}{453.59237 \text{ g}} \times \frac{16 \text{ oz.}}{1 \text{ lb.}}$$

$$= \frac{510 \times 16}{453.59237}$$

$$= \frac{8160}{453.59237}$$

$$= 17.98972059g$$

Rounded to the nearest whole number I get **18 ounces**. This confirms that the conversion from grams to ounces was calculated correctly.