G3-M2-Lesson 17

Lucy buys an apple that weighs 152 grams. She buys a banana that weighs 109 grams.

a. Estimate the total weight of the apple and banana by rounding.

$152 \approx 200$

$109 \approx 100$

I can round each number to the nearest hundred.

$200\ grams + 100\ grams = 300\ grams$

I can add the rounded numbers to estimate the total weight of the apple and the banana. The total weight is about 300 grams.

b. Estimate the total weight of the apple and banana by rounding in a different way.

$152 \approx 150$

$109 \approx 110$

I can round each number to the nearest ten.

$150\ grams + 110\ grams = 260\ grams$

I can add the rounded numbers to estimate the total weight of the apple and the banana. The total weight is about 260 grams.

c. Calculate the actual total weight of the apple and the banana. Which method of rounding was more precise? Why?

$$\begin{array}{r} 152\ grams \\ +\ 109\ grams \\ \hline 261\ grams \end{array}$$

Rounding to the nearest ten grams was more precise because when I rounded to the nearest ten grams, *the estimate was 260 grams, and the actual answer is 261 grams. The estimate and the actual answer are only 1* gram *apart! When I rounded to the nearest hundred grams, the estimate was 300 grams, which isn't that close to the actual answer.*

I can use the standard algorithm to find the actual total weight of the apple and the banana.