

## The Candy Conundrum: How Much Is Enough?



### Scenario:

Your school is hosting an event where you'll be handing out candy to more than 350 students, and you want to be sure you don't run out!

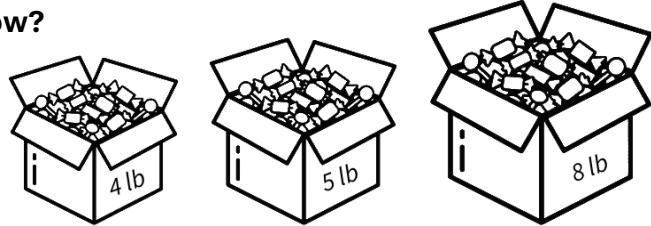
Candy is sold by **weight** (4lb, 5lb, and 8lb boxes), not by number of pieces.

How can you estimate how many candies you'll get in each box, and how much to buy?

### Part 1: What do you know? What do you need to know?

Before you begin calculating, jot down:

- What **information** do you already have?



- What **assumptions** will you need to make?

- What **additional data** would help you to make a better estimate?



#### Did you know?

The abbreviation lb comes from the Latin phrase *libra pondo*, which means "pound by weight."

The word *libra* referred to a balance or set of scales. That's why the astrological sign Libra is represented by scales!

Over time, *libra pondo* was shortened to lb, and that's the symbol we still use today.

**Part 2: Estimating Candy Counts****Approximate Weights for Candy**

Candy Type	Mini chocolate bar (Snickers, KitKat)	Tootsie Roll / Starburst	Lollipop	Mini Skittles / M&Ms
Weight Per Piece (ounces)	0.5 oz	0.2 oz	0.4 oz	0.7 oz

1. Choose a reasonable way to model the mix. (For example, assume equal pieces per type or equal weight per type.) Explain your choice.
2. Using your model, estimate an average number of **pieces per pound** for the mix. Be sure to show your work. (Hint: 1 pound = 16 ounces)

**1 pound  $\approx$  \_\_\_\_\_ pieces**

3. Based on your estimates, how many boxes would you need to buy to have enough candy for all 350 students? Be sure to show your reasoning and list any assumptions you made.

I would buy \_\_\_\_\_ 4lb boxes, \_\_\_\_\_ 5lb boxes, and \_\_\_\_\_ 8lb boxes.

I assumed \_\_\_\_\_  
\_\_\_\_\_.