

4565: Computing Foundations for a Digital Age

Unit 4

Candy Data Collection Form

Group Members: _____

Step 1: Collect Data

- Total Weight of **unopened bag** of candy: _____
- Sort the candy into groups. (Ex: same type or flavor)

How many of each type:

Candy Type	Count	Weight of one piece	Count x Weight of 1 piece =
Total Weight (add last column)			

- Does your total weight match the weight of the weight you wrote for #1? _____
- Why might they be different?

Step 2: Analyze Data

- Which candy type is most common? _____
- Which candy type is least common? _____
- What percentage of the total sample is each candy type? (Show calculations below)

Step 3: Visualize Data

- Create a **bar chart** or **pie chart** to represent your data.

Step 4: Create a Spreadsheet

- Use Google Sheets/Excel to create a spreadsheet of your data.
- Set up your spreadsheet to match the table you created in STEP 1.
- Use formulas to figure the amounts for you. (See formulas below)

Example of how to use formulas:

Candy Type	Count	Weight of one piece	Count x Weight of 1 piece =
B2	C2	D2	=SUM(C2*D2)
B3	C3	D3	=SUM(C3*D3)
B4	C4	D4	=SUM(C4*D4)
B5	C5	D5	=SUM(C5*D5)
B6	C6	D6	=SUM(C6*D6)
B7	C7	D7	=SUM(C7*D7)
Total Weight (add last column)			=SUM(E2:E7)

- Which was easier for you? Calculating on paper OR Using formulas
- Use Sheets/Excel to create a graph of your chart.

Bonus Challenge:

Combine classroom data and make predictions on what another bag might contain.

Predict the candy distribution in a different sample.

Test your prediction by collecting and analyzing a new sample.

How close were your predictions?