Title: Lettuce Calculate!

Goal: Students will collect data and calculate percentages and ratios, and use the data to create scatter plots.

Objectives:
- Students will understand how to calculate percentages.
- Students will understand how to calculate ratios.
- Students will understand how to create and analyze scatter plots.

Lesson Outline:

Engage: Taste Test

Explore: Data Collection (Ratios and Percentages)

Explain: Data Collection (Scale 1 – 10)

Extend: Comparing Data

Evaluate: Analyzing Data

Grade Level: 6th-8th

GPS / CC Addressed:
- Using Ratios 6RP1, 6RP3
- 7RPA2
  - Display and Summarize Data 6SPB4
  - 8SPA1

Materials Needed:
- Lettuce for Taste Test
- Data Collection Sheets (Included)

Time Needed: 1 hour

For more information, visit georgiaorganics.org/lettucetryit
Lesson Plan:

Engage:
- Conduct a Lettuce Taste Test
- Discuss opinions of lettuce

Explore:
- Collect data on student opinions on a tally chart (Loved it, It was Okay, Didn’t Care for it)
- Review calculating the ratios for each opinion
  - Model finding the ratio for “Loved it”
  - Work in small groups to find the ratio for “It was Okay”
  - Work independently to find the ratio for “Didn’t Care for it”
- Review calculating the percentages for each opinion
  - Model finding the percentage for “Loved it”
  - Work in small groups to find the percentage for “It was Okay”
  - Work independently to find the percentage for “Didn’t Care for it”
- Discuss the results of the data collection (in terms of ratios and percentages)

Explain:
- Collect data on student opinions on a tally chart (Scale 1 – 10)
- Transfer data from tally chart to scatter plot
- Discuss the results of the data collection (in terms of data clusters, outliers)

Extend (optional):
- Collect an Additional Set of Data
  - Boys / Girls?
  - Class 1 / Class 2?
  - Grade 1 / Grade 2?
- Compare Data Sets (in terms of percentages, ratios, and distribution of data)

Evaluate:
Write a paragraph describing the results of the data collection citing specific data points to support your claims.

For more information, visit georgiaorganics.org/lettucetryit
Data Collection (Loved it, It was Okay, Didn’t Care for it)

Taste Tested Item **Lettuce**

<table>
<thead>
<tr>
<th>Loved It</th>
<th>It was Okay</th>
<th>Didn’t Care for It</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Total ___ / Whole ___
Ratio ___:___
Percentage ___%

For more information, visit georgiaorganics.org/lettucetryit
Data Collection (Scale 1 – 10)

Taste Tested Item **Lettuce**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>9</th>
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</tbody>
</table>

Using the tally marks above, create a scatter plot on the number line below.