Calculate!



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

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

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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)



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Extend (optional):

- Collect an Additional Set of Data
 - o Boys / Girls?
 - o Class 1 / Class 2?
 - o 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.

Data Collection (Loved it, It was Okay, Didn't Care for it)

Taste Tested Item <u>Lettrice</u>

| Loved It | It was Okay | Didn't Care for It | | |
|---------------|---------------|--------------------|--|--|
| | | | | |
| | | | | |
| | | | | |
| Total / Whole | Total / Whole | Total / Whole | | |
| Ratio: | Ratio: | Ratio: | | |
| Percentage% | Percentage% | Percentage% | | |

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Calculate!

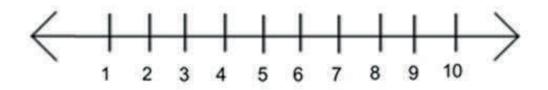


Data Collection (Scale 1 - 10)

Taste Tested Item <u>Lettuce</u>

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| | | | | | | | | | |
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Using the tally marks above, create a scatter plot on the number line below.



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0 1 hr

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