

Spreadsheet Lesson Plan

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Suggested Grade Level - 5th

Content Area - Math

S.O.L.s Covered: Math 5.4, 5.6, 5.17, C/T5.1, C/T5.2, C/T5.3, C/T5.4

Description:

This lesson is designed to strengthen the basic concepts of fractions, decimals, percents, and order of operations. The students will use manipulatives and spreadsheet programs to reinforce these skills. Students will already have received instruction as to the process of creating spreadsheets, entering data, and creating graphs.

Objectives: The students will...

1. create a spreadsheet, chart and graph using their M&M data.
2. show steps for converting fractions to percents.
3. write and solve math problems.
4. write and solve equations using order of operations.
5. create a tally chart and turn the frequency of occurrence into fractions and percents.

Procedure:

1. Distribute bags of M&Ms to students
2. The student will sort his bag of M&M's according to color.
3. Create a chart on paper showing how many of each color is represented.
4. Write a fraction and reduced fraction for each color based on the total amount of M&M's in the bag.
5. Create a spreadsheet using the information from step 2.
6. Insert a field - (Total) and paste the sum function to show the total number of M&M's in the bag.
7. Make a pie chart from the spreadsheet. Manipulate the colors to match the colors of the M&M's. Set the data labels to show number of M&M's and percentage. Title the graph "M&M Graph"

8. Make a new chart showing the following information: Color of M&M, Fraction of Total, Reduced Fraction, and Percentage. Use the fractions from step 3 and the percentages from step 6.
9. Print document.
10. On the bottom of the document, show step by step how to convert a fraction to a decimal to a percent.

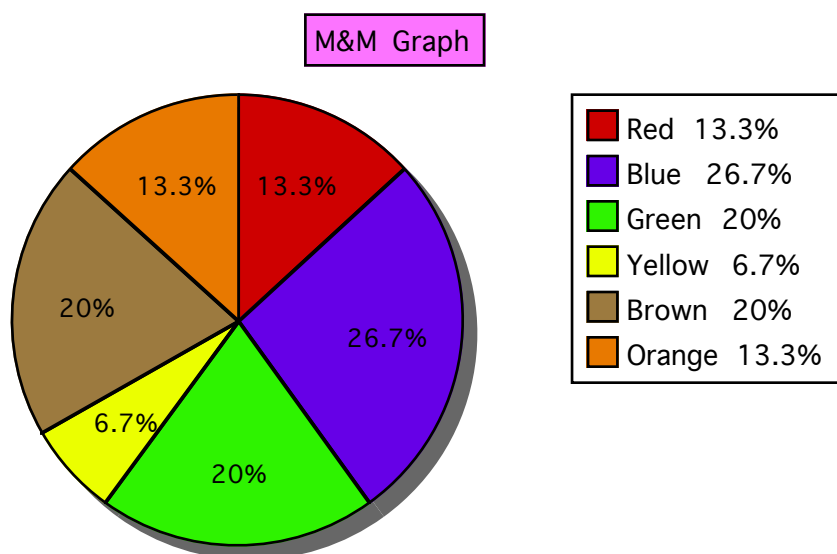
Evaluation:

Evaluation of this lesson will be based on:

1. Quality and accuracy of data collected
2. Organization of spreadsheet data
3. Hard Copy documentation of results
4. Accuracy of calculations
5. Description of the process of converting fractions to percentages

Sorting and Graphing M&M's

Red	4
Blue	8
Green	6
Yellow	2
Brown	6
Orange	4
Total	30



Equivalent Fractions

<u>Colors of M&M</u>	<u>Fraction</u>	<u>Reduced Fraction</u>	<u>Percent</u>
Red	4/30	2/15	13.3%
Blue	8/30	4/15	26.7%
Green	6/30	1/5	20%
Yellow	2/30	1/15	6.7%
Brown	6/30	1/5	20%
Orange	4/30	2/15	13.3%