

Utah State Core Standard and Indicators

Summary

In this activities, students use percentage reasoning to read pie graphs. Then they extend their understanding by calculating percentages for specific groups.

Enduring Understanding

Because statistical collection and organization of data frequently involves fractions, decimals and percentages. Understanding and analyzing these statistics effectively is important to functioning successfully in our world

Essential Questions

How are fractions, decimals, and percentages used in data collection and organization?

Skill Focus

- Using and interchanging fractions, decimals, percentages
- Organizing data
- Basic Probability

Vocabulary Focus

Assessment

- Have the students do individual or small group statistics projects. See the statistics project included in module 2.

Materials: Calculators

Launch

Explore

Summarize

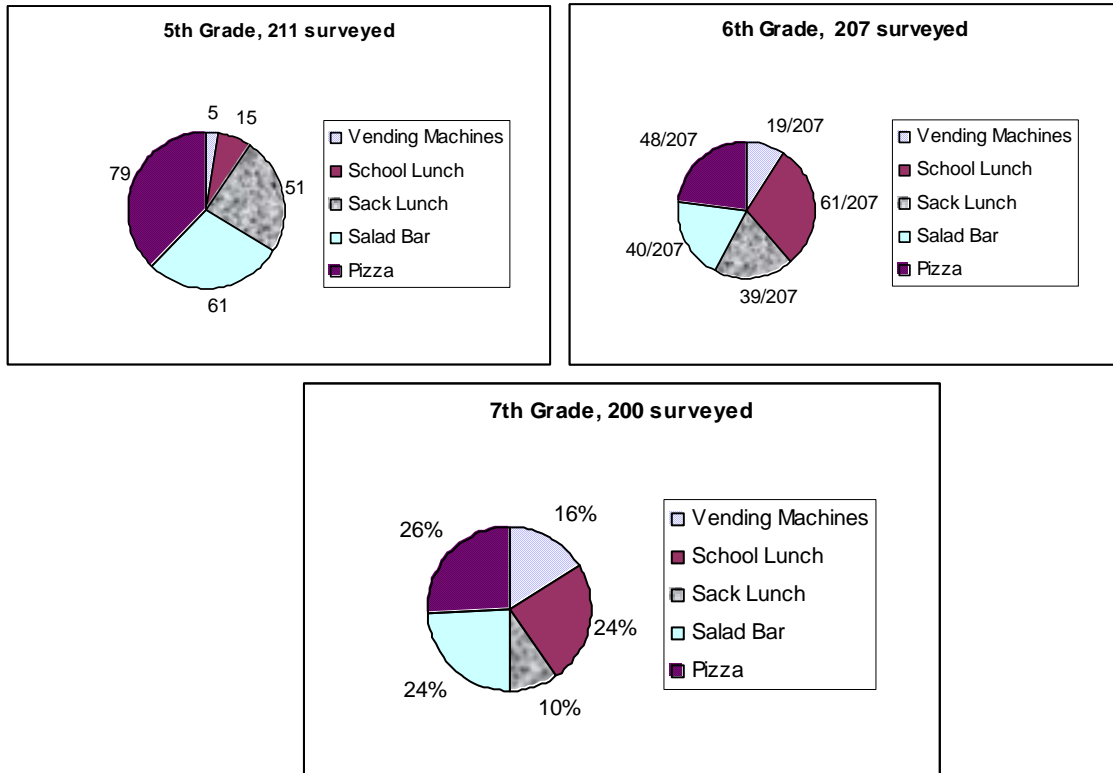
Apply

Pre 2.9 Lunch with Fractions, Decimals, Percentages

Mrs. Baker has 35 students in her 4th period pre-algebra class. There are 16 girls and 19 boys.

- 1) What fraction of the **class** is female? _____ Percent? _____
- 2) Three girls were absent today. What fraction of the **class** is this? _____ Percent? _____
 What fraction of the **girls** is this? _____ Percent? _____

The students at West Jordan Middle School collected data regarding what they did for lunch. They were asked to make circle graphs of their data. Each grade made a separate graph, labeling their graphs in different ways.



The cafeteria manager has asked you to redo the graphs using the same kind of numbers on each so that the data could be more easily summarized.

- 1) What kind of numbers do you think should be used, whole numbers, fractions, or percentages? Explain your choice.
- 2) Replace the labels above using consistent labels of your choice.

Use the graphs to complete the following table that shows the combined data for Mrs. Baker.

	5 th Grade			6 th Grade			7 th Grade			Row Totals		
	#	Fr.	%	#	Fr.	%	#	Fr.	%	#	Fr.	%
Vending Machines												
Regular School Lunch												
Sack Lunch												
Salad Bar												
Pizza												
Column Totals												

A trend is a pattern of change in data. Mrs. White asked if you see any trends in these data from grade to grade. Write a paragraph answering her question. Include at least three trends in your paragraph.