



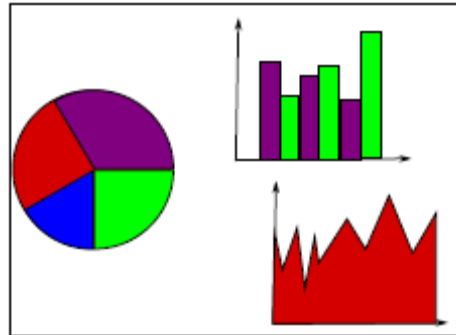
Drexel-SDP GK-12 LESSON

- Lesson Title and Identifier:

Title: Visualizing Math: Presenting Information

Identifier: 2.1

- Module: Math
- Grade Level: 6th
- Subject Area (Unit): Math
- Concept:
 - Vocabulary
 - Pie Chart
 - Bar Chart



- Objectives:

In this module, students will generate information based on their own answers and present this information.

- Keywords: fraction, percentage, graph, pie chart, bar graph, line graph, circles, angles

- PA Academic Standards:

Math 2.3 Measurement and Estimation
2.9 Geometry

- Setting/Group Size: 30 students
- Duration/Time Required: 1 class period
- Materials List (include safety equipment if applicable)

Chalkboard and student answers

Pencil

Paper

Compass and protractor

- Methods and Procedure:

Step 1: Generate Data. We begin by generating some data using the students. In the case below, we consider the favorite flavors of ice cream in the class. Draw this chart on the board.

Ice Cream Flavor	Number of Students	Fraction of Students	Percentage of Students
Vanilla			
Chocolate			
Strawberry			
Cookies and Cream			
Cherry Garcia			
Total			

Step 2: Once the students have voted for their favorite flavor, review how we can display this information in fractional form? Do we have any answers that are the same? (Ex. 3 people like chocolate and 3 other people like strawberry. Review this as a test taking skill.) Can we reduce any of the fractions?

Step 3: Review how to convert fractions into percentages.

Step 4: Take the information and use three types of graphs, (pie, bar, and line) to display the data. Review the parts of the graphs and labeling. In particular, review how to find the percentage of a pie chart. This will require a brief review of circles and angles.

Step 5: Analyze the data. Review mean (average) and median. What does this tell us about the class? What if we looked at your grades instead? Give the next example chart. As part of their homework have them complete the chart and display their findings in a pie chart.

Grade Range	Number of Students	Fraction of Students	Percentage of Students
90-100			
80-89			
75-79			
70-74			
60-69			
Total			

Step 6: Review how to convert percentages back into fractions.

Step 7: Discuss tissue engineering with the students after completing this lesson along with charts that follow cell growth.

- Assessment

You will be evaluated on a scale from 0 to 4 on:

Participation

Task Completion

Math Correctness

- Authors

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