

**Further investigations:**

Encourage your student to record and graph the number of windows, doors, chairs, etc. in your home.

If your student gets an allowance, ask her to make a graph of how she spends her money.

Help your student make a circle graph of how he spends a day. Other than sleeping and school, how does he spend most of his time?

**Terminology:**

**Circle graph:** A graph that displays data in the form of a circle. The circular region is divided into a number of pie-shaped sectors to represent portions of the data

**Tally mark:** A mark used in keeping track of acts or objects. The marks consist of four vertical lines bundled diagonally or horizontally by a fifth line

**Line graph:** A visual display of data to show change over time (continuous)

**Frequency table:** A table that organizes the number of times something occurs in an interval or set of data

**Percent:** Per hundred. A special ratio that compares a number to 100 using the symbol %.

**Pictograph:** A visual display of data shown by using symbols. Also referred to as a picture graph

**Line plot:** A graph that uses symbols above a number line to represent data

**Bar graph:** A visual display used to show data using horizontal or vertical bars

**Data:** Information gathered; facts or figures from which conclusions may be drawn.

**Venn diagram:** Venn diagrams use circles to show relationships among sets. Frequently these circles overlap. Each circle contains data from one of the sets being compared. If two sets contain the same data, these similarities show in the intersection of the circles

**Book'em**

**The Math Curse** by Jon Scieszka

Use graphs from newspapers

**Related Files:**

[www.ceismc.gatech.edu/csi](http://www.ceismc.gatech.edu/csi)

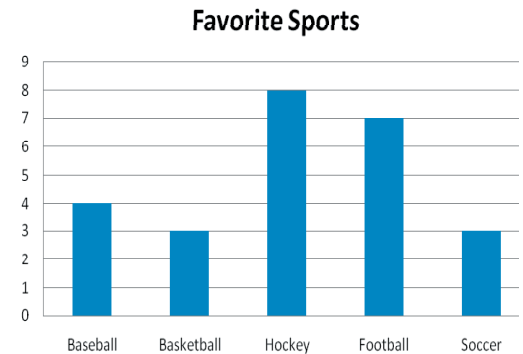
**Groovy Graphing****Students will:**

- Read, interpret, and analyze given set(s) of data
- Collect and display data various ways
- Determine the most appropriate ways of displaying data

**Classroom Cases:**

1. Create a graph to display the data from the table:

Favorite Sport	
Sport	# of Students
Baseball	4
Basketball	3
Hockey	8
Football	7
Soccer	3



2. Using the table and the graph, answer the following questions:

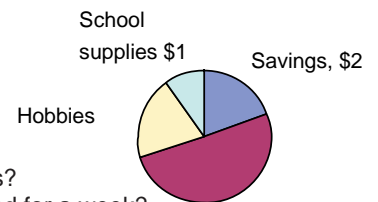
- a. How many students like baseball and football?
- b. Which sport is the most popular?
- c. How many more students like football than soccer?
- d. How many students participated in the survey?

**Case Closed - Evidence:**

- a. 11 students
- b. Football
- c. 4 students
- d. 25 students

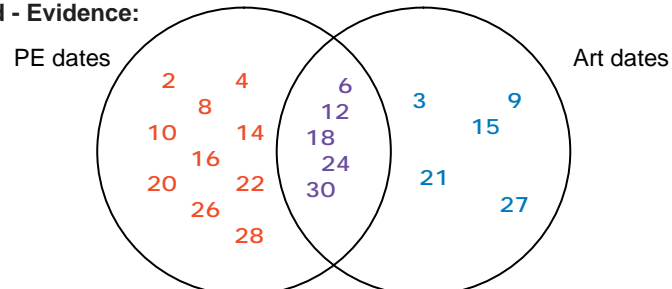
3. Use the graph to answer the questions below:

- a. How much does Jordan budget for hobbies?
- b. What is the total amount of money budgeted for a week?
- c. What fraction of the weekly budget goes into savings?

**Jordan's Weekly Budget****Case Closed - Evidence:**

- a. Since the savings sector is the same size as the hobbies sector, they represent the same amount. Jordan budgets \$2 for hobbies.
- b. Hobbies, school supplies, and savings make up half the graph and they total \$5. So the whole graph represents  $2 \times \$5 = \$10$ . Total amount budgeted for a week is \$10.
- c. Savings accounts for  $\frac{2}{10}$  or  $\frac{1}{5}$  of the weekly budget.

4. Mr. Johnson's class has art on the days of the month that are multiples of 3. The class goes to PE on the even dates. On which dates will Mr. Johnson's class have art and P.E?

**Case Closed - Evidence:**

The class has art and PE on these dates: 6, 12, 18, 24, and 30.

**Clues:**

Pie charts and circle graphs name the same type of graph.