

# Survey and Statistics

What is Your  
Favorite Subject?

How Many  
Different  
Sports Do You  
Play Well?

How Many  
Times a Week  
Do You Eat  
Lunch?



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**Survey and Statistics**  
**Lesson 4**  
**Creating Line Graphs and Charts**

**Objectives:**

Students will create line graphs and charts

**Materials Needed:**

Graph paper

The teacher should create a line graph showing what time he/she woke up each morning.

**Opening Activity:**

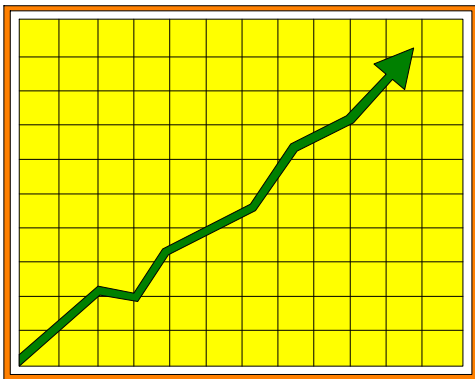
Show the graph on the next page. Ask the students why this information is in the form of a line graph and not a bar graph. (*Line graphs show changes over time.*)

**Activity:**

- 1) Discuss how to set up a line graph using the graph on the next page.
  - a) Explain that the x-axis shows the dates for the time changes.
  - b) Explain that the y-axis shows the information that has changed
  - c) Point out the main title, the x-axis title and the y-title.
  - d) Ask; “Why do you think that every hour of the day is not listed on the y-axis?”
- 2) Have the students create a line graph similar to the one on the next page. They may plot, over the next five days, what time they went to bed or woke up. They will want to pick the one that shows the greatest difference. They need to decide what times should be listed on the y-axis and what days should be listed on the x-axis.
- 3) For five days the students should plot their time they go to bed or wake up.

**Closure:**

The teacher can share his/her graph with the class.



### Time I Woke Up in the Morning For the Week of April 3-9

