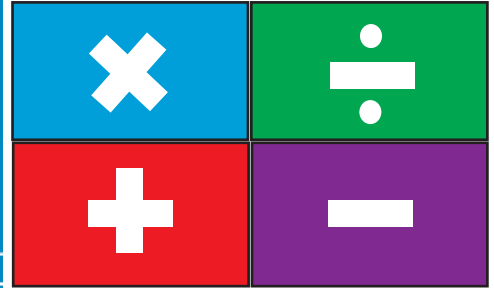
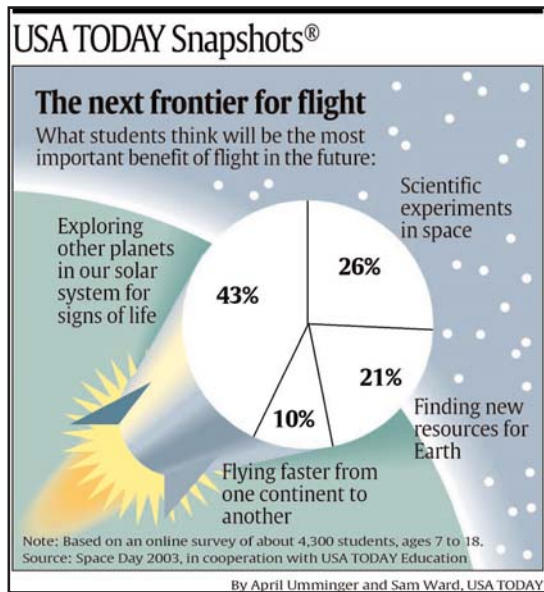


# Math TODAY™

## Student Edition



## The Next Frontier For Flight



### Activity Overview:

The USA TODAY Snapshot® pictured above shows the responses of about 4,300 students to a survey entitled "The next frontier for flight." Students were asked what they thought would be the most important benefit of flight in the future. You will use this data to recreate the circle graph shown above on your TI graphing handheld.

You will use the handheld in your classroom to create a variety of graphs, charts and tables to organize and analyze statistical data throughout the school year.

### Focus Questions:

- If 4,300 students took part in this survey, how many students thought that "Scientific experiments in space" would be the most important benefit of flight in the future?
- How many more students thought that "Finding new resources for Earth" was a more important benefit of flight in the future than "Flying faster from one continent to another"?
- Ten percent of the students surveyed thought that "Flying faster from one continent to another" was the most important benefit of flight in the future. What is the value of 10 percent written as a fraction in lowest terms?

### Activity Extensions:

- Select a topic or issue from USA TODAY and conduct your own survey to collect data. Then create a circle graph or other representations using your own data. Then compare your data with any provided in USA TODAY.
- Explain how this data might impact future space exploration; government budgeting for space research; education programs; and, your future.

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This activity was created for use with  
Texas Instruments handheld technology.

## The Next Frontier For Flight

### Procedure:

- On the TI-73 Plus or TI-73 Explorer graphing handheld, use the Plot key to access the circle graph in the Stat Plot menu by pressing the  $\boxed{2nd}$  and  $\boxed{Y=}$  keys.
  - Your teacher will show you how to enter the data in List 1 and List 2 in order to reproduce the circle graph shown in the USA TODAY Snapshot.
  - When you have completed the circle graph, use the handheld to answer the questions listed at the beginning of the activity.
- On the TI-83 Plus handheld or the TI-83 Plus Silver Edition, you must have the TI CellSheet™ Application loaded on your handheld in order to create a circle graph.
  - Press the APPS key to access the Applications menu. Use the down arrow to locate the menu item titled "CellSheet" and press the  $\boxed{ENTER}$  key.
  - Once the CellSheet APP has been opened, locate and then access the CellSheet Menu by pressing the  $\boxed{GRAPH}$  key. On the CellSheet Menu select item 4 "Charts." On the Charts Menu select item 7 "Pie." Your teacher will continue to help you to create the "pie chart" (circle graph) using the data in the USA TODAY Snapshot.
  - When you have completed the circle graph, use the handheld to answer the questions listed at the beginning of the activity.

### Data Source:

Space Day 2003, in cooperation with USA TODAY Education

### Materials:

- TI-73 Explorer or TI-83 Plus
- CellSheet™ Application (if using the TI-83 Plus or TI-83 Plus Silver Edition)
- TI Tech Guide "Basic Data Entry using the List Editor"

### Additional Resources:

**USA TODAY Education** (special section links are subject to change)

- 100 Years of Flight (<http://www.usatoday.com/educate/flight/index.htm>)
- Visions of Exploration (<http://www.usatoday.com/educate/afaindex.htm>) - requires sign-in but is free.

### USA TODAY.com

- Weather (<http://www.usatoday.com/weather/weatherfront.aspx>)

### Space Day

- (<http://www.spaceday.com>)

### Additional Information:

In addition to CellSheet, Texas Instruments has a wide variety of Application software programs that can be loaded on either the TI-73 Explorer or TI-83 Plus. Visit the TI website at [www.education.ti.com](http://www.education.ti.com) to find out about the many programs that are available.