Math TODAY™
Student Edition

USA TODAY

NO. 1 IN THE USA

How close is Florida?

USA TODAY Snapshots®

How close is Florida?

If a vote were a sheet of paper, a stack of George W. Bush's 2,910,299 votes in Florida would rise to a height of 970.1 feet. Al Gore's stack of 2,909,911 votes would rise to 970 feet.

1,046 feet

970.1 feet

970 feet

Margin of difference

1.6 inches

Chrysler Building **Bush Gore**

Source: Martin Fertal
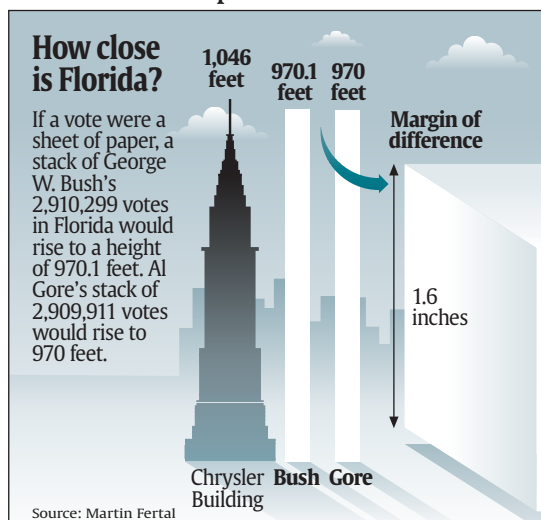
By Frank Pompa, USA TODAY

Focus Questions:

● How significant is one vote in a presidential election?

● Does the visual representation of the USA TODAY Snapshot give a better idea of how close the presidential election was in Florida?

● How close was the election in your state?

Activity Overview:

How close did you pay attention to the 2000 presidential election? The 2000 presidential election was closer than most in recent history. It raised questions of voting procedures, voting accuracy and our current electoral system. But how close was it? The USA TODAY Snapshot "How close is Florida?" gives a visual representation of the difference in the votes between Al Gore and George W. Bush for the 2000 presidential election and demonstrates how insignificant the difference was compared to the number of votes cast.

In this activity, you are going to recreate and verify the information in the USA TODAY Snapshot. You will determine the number of sheets of paper in a one-inch stack. Using this information, you then will determine the thickness of one vote (sheet of paper) and see how close your calculations are to the graphic designer's calculations.

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

For more information, visit:
www.education.usatoday.com
www.education.ti.com/USAT

How close is Florida?

Procedure:

Step 1
Gather your materials.

Step 2
Each member of your team should measure out a ½ inch of paper and count the number of sheets. Complete the chart by filling in your data and then doubling it to estimate the number of sheets per inch.

Team member	Number of sheets per ½ inch	Estimated number of sheets per 1 inch

a) Calculate the average (mean) number of sheets of paper in a one-inch stack. Write this number on your Assessment and Evaluation sheet.

b) Calculate the number of sheets of paper per inch used in the graphic.

c) What was the total number of votes for the two candidates combined? (You will need this for the last question on the Assessment and Evaluation sheet.)

    Total number of votes: _____

Step 3
Complete the Assessment and Evaluation sheet.

Data Source:

Martin Pertal

Materials:

- TI-83 Plus family or TI-84 Plus family
- Stack of paper
- Ruler

Additional Information:

- 12 inches per 1 foot
- Make sure your units are consistent

How close is Florida?

Assessment and Evaluation:

Q. **What was your group's average number of sheets of paper per inch? What is the thickness of one sheet of paper?**

A. Number of sheets of paper per inch: _____   Thickness of one sheet: _____

Q. **How high would your vote stacks be?**

A. Bush: _____ inches = _____ feet

Gore: _____ inches = _____ feet

Q. **How many sheets per inch did the graphic designer use? What is the thickness of one vote? Show your work in terms of a mathematical expression!**

A. Number of sheets of paper per inch: _____   Thickness of one sheet: _____

Q. **What was the difference in your calculations and that of the graphic designer's? Was the difference significant? What could account for the difference?**

A. _____

_____

Q. **If you were a member of the Bush campaign team and wanted the difference to appear larger in the graphic what could you do (without falsifying information)?**

A. _____

_____

Q. **What was the percent of difference of total votes between the number of votes received by each candidate? Show your work and round your answer to the nearest hundredth of a percent. What does your answer tell you about the election?**

A. _____

_____