F@CUS READERS

Lesson Plan

Understanding Graphs and Charts

Book: The Tet Offensive **Series:** Major Battles in US History **Level:** Navigator

Objective

To help students practice reading and representing information in graphs and charts.

Supplies

- The Tet Offensive
- Paper, pencils, and colored pencils

Before the Activity

Read through *The Tet Offensive*, or assign it to the students to read on their own.

Activity

Show the students the "Tet Offensive: Estimated Deaths" graph on page 5. Explain that it is a bar graph. Bar graphs help readers compare numbers. Each category has its own colored bar. Larger numbers have longer bars. Ask the following questions about this graph:

- Which group had the most estimated deaths? (A: Communist soldiers)
- Which group had the fewest estimated deaths? (A: US soldiers)
- How does the graph make this easy to see? (A: The US soldiers' bar is much shorter than the Communist soldiers' bar.)

Next, show the students the "US Troop Strength by Year" graph on page 15. Explain that it is a line graph. Line graphs show information from two categories. One category is shown along a line that goes from left to right. This is called the x-axis. In this graph, the x-axis shows the year. The other category is shown along a vertical line. It is called the y-axis. In this graph, the y-axis shows the number of soldiers who were in Vietnam.

Line graphs help readers see how the two categories are related. In this graph, readers can see how the number of soldiers in Vietnam changed over time. Each year is marked on the graph by a red dot. The dots line up on the y-axis with the number of soldiers who were in Vietnam at that time. If there were more soldiers, the dots are higher up on the graph. Ask the following questions about this graph:

• In what year were the most soldiers in Vietnam? (A: 1968)

- How does the graph make this easier to see? (A: This year's dot is up highest on the graph.)
- Why are the dots are connected by red lines? (A: The lines help readers see how the numbers changed from year to year.)

Now show the students the "US Troops Killed in the Vietnam War (1955–1975)" chart on page 28. Explain that it is a pie chart. Pie charts also help readers compare numbers. They show percentages or parts of a whole. This pie chart shows how many troops from different branches of the US military were killed in the Vietnam War. Each branch is represented by a colored slice. Larger numbers have wider slices. Ask the following questions about this chart:

- Which branch of the US military lost the most troops during the Vietnam War? (A: The Army)
- Which branch lost the fewest troops during the Vietnam War? (A: The Navy)
- How does the pie chart make this easier to see? (A: The colored slice representing the Army is much larger than the colored slice representing the Navy).

Finally, explain that the same set of numbers can be represented by different kinds of graphs. Have the students practice this by using the numbers from the pie chart on page 28 to make a bar graph. The bar graph should include a scale along the left side. The scale should look like the y-axis of the line graph on page 15, but it should be numbered by 5,000s instead of 100,000s. Students should draw a colored bar for each branch of the US military. The heights of these bars should line up with the scale.

Evaluation

Did the students answer the questions accurately? Did they draw accurate bar graphs? Did their graphs include a scale? The students' graphs should look approximately like this:



US Troops Killed in the Vietnam War (1955–1975)

Standards

This lesson may be used to address the Common Core State Standards' writing standards, grade 4 (RI 4.7).