

HOW BIG WAS WORLD WAR II?

INTRODUCTION

This is an introduction into using numbers to tell the story of an event. Quantitative thinking is used by scientists all the time and graphs are a very important way to analyze and communicate information. If your students need to review how to make graphs by hand, this activity would be one to choose. You might also use this as an opportunity to learn or practice making graphs with spreadsheets.

STANDARDS

This activity gives students a chance to graph data and then answer questions about them. It supports the CCSS for Math, Math Practice 1 (making sense of problems and persevering in solving them) and Math Practice 2 (reason abstractly and quantitatively). It also is a chance to use the Science and Engineering Practice Using Mathematics and Computational Thinking.

NAME:

DATE:

HOW BIG WAS WORLD WAR II?

There are many different ways of estimating the human cost of the war, and the chaos caused by the conflict can lead to different estimations of the number of casualties. This table estimates casualties due to World War II:

COUNTRY	LIVES LOST
Great Britain	449,500
United States	418,500
Japan	2,700,000
Germany	7,233,000
China	20,000,000
Rest of Europe	11,015,600
Soviet Union	23,100,000
TOTAL	65,000,000

These numbers are from The National WWII Museum's estimates in Beyond All Boundaries.

Make a bar graph of these numbers on graph paper.

How big was World War II compared to other wars in which the United States was involved?

Another way to examine this is to look at the financial cost of the war:

WAR	MILLIONS OF DOLLARS (CALCULATED IN 2011 VALUE)
American Revolution (1775-1783)	\$2,407
War of 1812 (1812-1815)	\$1,533
Civil War (1861-1865)	\$79,742
World War I (1917-1921)	\$334,000
World War II (1941-1945)	\$4,104,000
Korean War (1950-1953)	\$341,000
Vietnam War (1965-1975)	\$738,000

What kind of graph would best represent these numbers? Make a graph on graph paper.

What does this graph tell you about the size of World War II?

HOW DID THE TYPES OF MILITARY SERVICE CHANGE UP TO AND AFTER WORLD WAR II?

This graph details the military details of how US wars were fought.

WAR	ARMY	NAVY	MARINES	AIRFORCE
Civil War*	2,128,948	84,415		
World War I	4,057,101	599,051	78,839	
World War II	11,260,000	4,183,466	669,100	
Korean War	2,834,000	1,177,000	424,000	1,285,000
Vietnam War	4,368,000	1,842,000	794,000	1,740,000

*These numbers are from the Congressional Research Service Report RL32492 of 2015. *Only Union troops.*

What kind of graph would best represent these numbers? Make a graph on graph paper.

What generalization can you make about this pattern?