

Technology of War

In Unit 7, you studied the economic and political upheavals that led to two world wars. For the first time, war involved not only the interested countries, but also their allies near and far and their colonies in far-flung places. In the next six pages, you will analyze the widespread use of machines and other technologies as tools for fighting and the increasingly involved role of civilians in war.



Maxim Machine Gun ▲

Hiram Maxim (above) invented the first portable, automatic machine gun. Machine guns fired hundreds of rounds per minute and were used by all the combatants in World War I.

1884



Tanks ▲

Tanks, like the early British model shown above, enabled armies to travel over uneven ground and barbed wire. Although too slow to be used to full advantage at first, they were devastating against soldiers in trenches.

1909

1915 1916

▼ First Military Plane

The earliest military planes were used for reconnaissance of enemy positions. A passenger could drop bombs (below) and, in later World War I models, operate a machine gun.



Poison Gas ▼

Poison gases were introduced to help break the stalemate of trench warfare. They caused suffocation, blistered skin, or blindness (below) to those exposed.





Blitzkrieg ▲

The Germans used blitzkrieg or "lightning war" to invade Poland.

They employed air strikes, fast tanks, and artillery, followed by soldiers sped into battle on trucks (shown above). They swiftly overwhelmed Poland and disrupted its command and communications.

1939

1944 1945

Atomic Bomb ▶

The United States dropped two atomic bombs on Japan and became the first nation to use nuclear weapons. An atomic bomb (right) creates an explosion that causes massive damage. The radioactive particles released are carried by winds for weeks.



▼German Me 262

Military jet planes were first used by the Germans in 1944. These planes added speed to fire power. The Me 262 (below) was the only jet to be used extensively in World War II.



Comparing & Contrasting

1. How did technology change the nature of war in the 20th century?
2. Compared with earlier guns, what made machine guns so effective?
3. How did airplanes change the way war was carried out?

Expansion of Warfare

World War I and World War II both began as localized wars. As the allies of the opposing combatants became involved in the wars, combat spread to distant parts of the world. Countries attacked each other's colonies, attempted to gain territory for themselves, dedicated massive amounts of physical and human resources, and sometimes sought to kill entire populations.

Total War

A feature of warfare in the 20th century was how entire national economies were directed toward the war effort. As a result, civilians were not only potential victims of combat, but they also became actual targets themselves. Civilians also became active participants, producing arms, food, vehicles, and other goods needed for war. Many factories stopped producing consumer goods and began making products needed by the military.

London ►

The photograph shows a section of London destroyed by bombs in the Battle of Britain during World War II.

DOCUMENT-BASED QUESTION

What effect do you think the kind of destruction shown in the photograph had on the residents of London?



◀ *Lusitania*

This newspaper shows the headline and various articles about the sinking of the British passenger ship *Lusitania* during World War I. Note also the announcement from the German embassy warning civilians not to travel to Great Britain because Germany considered it a war zone.

DOCUMENT-BASED QUESTION

What effect would the headline and photograph have on the American public?

Genocide

Genocide is the calculated and methodical destruction of a national, religious, ethnic, or racial group. The perpetrators consider their victims inferior or wish to take over their lands and property, or both. The mass killing of Armenians by Ottoman Turks beginning in 1915 is considered the first genocide of the 20th century. During the Holocaust, the Nazis killed more than 6 million people. As a result, in 1948 the United Nations approved an international convention to prevent and punish genocide.

PRIMARY SOURCE

INTERACTIVE

Genocide in WWII

Primo Levi describes how prisoners at the Nazi concentration camp of Auschwitz were selected for death.

Text not available for electronic use. Please refer to the text in the textbook.

PRIMARY SOURCE

INTERACTIVE

Genocide in WWI

The following excerpts are from telegrams sent to the secretary of state by the U.S. embassy in the Ottoman Empire. They concern the situation of Armenians in Turkey. The first passage was written by the American Consul General at Beirut and describes the deportation of villagers from the Zeitoon region, and the second calls attention to the killing of people in eastern Turkey.

July 20, 1915:

Whole villages were deported at an hours notice, with no opportunity to prepare for the journey, not even in some cases to gather together the scattered members of the family, so that little children were left behind. . . .

In many cases the men were (those of military age were nearly all in the army) bound tightly together with ropes or chains. Women with little children in their arms, or in the last days of pregnancy were driven along under the whip like cattle. Three different cases came under my knowledge where the woman was delivered on the road, and because her brutal driver hurried her along she died. . . .

These people are being scattered in small units, three or four families in a place, among a population of different race and religion, and speaking a different language. I speak of them as being composed of families, but four fifths of them are women and children.

July 31, 1915:

[The president of a charitable organization] has information from [a] reliable source that Armenians, mostly women and children, deported from the Erzerum district, have been massacred near Kemakh. . . . Similar reports comes from other sources showing that but few of these unfortunate people will ever reach their stated destination.

DOCUMENT-BASED QUESTION

What would be the result of scattering Armenian villagers in unfamiliar places under such terrible conditions?

DOCUMENT-BASED QUESTION

What was the Nazis' attitude toward selecting prisoners to be killed?

Comparing & Contrasting

1. Judging from the examples on these two pages, in what ways did warfare expand to include civilians?
2. If civilians manufacture materials for the war effort, should they be military targets? Why or why not?
3. How did modern weaponry contribute to both the sinking of the *Lusitania* and the bombing of London?



The Human Cost of War

The global nature of World Wars I and II wreaked a level of destruction unknown before. National economies were exhausted; farmland, towns, and villages were destroyed. More soldiers died in World War I than in all the conflicts of the previous three centuries, and millions more died in World War II. Civilians died by the millions as a result of military operations, concentration camps, the bombing of towns and cities, and starvation and disease.

Military Cost

Both sides in the two world wars suffered tremendous military casualties, including dead, wounded, and missing in action. About 8.5 million soldiers died in World War I and 19.4 million in World War II. The excerpts show how weapons and tactics contributed to the large number of casualties.

PRIMARY SOURCE

INTERACTIVE

Trench Warfare

British sergeant major Ernest Shephard remembers the first day of the Battle of the Somme in his diary.

A lovely day, intensely hot. Lots of casualties in my trench. The enemy are enfilading us with heavy shell, dropping straight on us. A complete trench mortar battery of men killed by one shell, scores of dead and badly wounded in trench . . . Every move we make brings intense fire, as trenches so badly battered the enemy can see all our movements. Lot of wounded [from the front] . . . several were hit again and killed in trench. We put as many wounded as possible in best spots in trench and I sent a lot down, but I had so many of my own men killed and wounded that after a time I could not do this. . . .

[L]iterally we were blown from place to place. Men very badly shaken. As far as possible we cleared trenches of debris and dead. These we piled in heaps, enemy shells pitching on them made matters worse.

DOCUMENT-BASED QUESTION

Judging from the quotation, what was Shephard's attitude toward the battle?

PRIMARY SOURCE

INTERACTIVE

Iwo Jima

Japan lost 21,000 soldiers and the United States 6,800 in the Battle of Iwo Jima. A U.S. Marines correspondent described part of the fighting below.

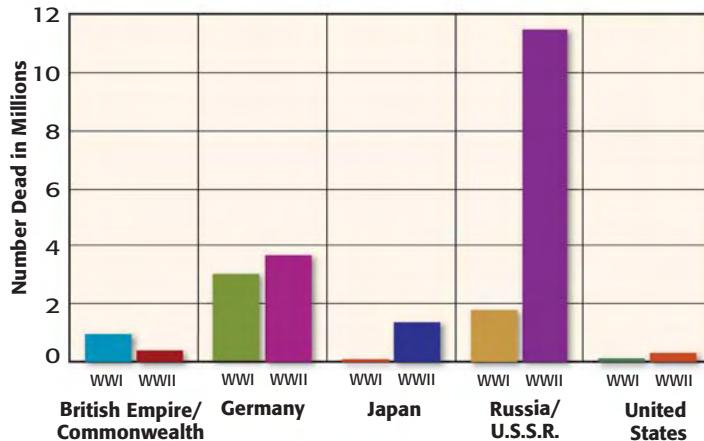
Behind a rolling artillery barrage and with fixed bayonets, the unit leaped forward in . . . [a] charge and advanced to the very mouths of the fixed [Japanese] defenses. . . . [T]he men flung themselves at the tiny flaming holes, throwing grenades and jabbing with bayonets. Comrades went past, hurdled the defenses and rushed across Airfield no. 2. . . . Men died at every step. That was how we broke their line. . . .

Across the field we attacked a ridge. The enemy rose up out of holes to hurl our assault back. The squads re-formed and went up again. At the crest they plunged on the [Japanese] with bayonets. . . . The [Japanese] on the ridge were annihilated.

DOCUMENT-BASED QUESTION

What attitude do you think the soldiers on both sides had to adopt to fight in such a bloody conflict as this?

Military Casualties, World War I and World War II



Source: Encyclopaedia Britannica

SKILLBUILDER: Interpreting Graphs

What factors may have contributed to the increased number of deaths in World War II over World War I?

Civilian Cost

Civilians suffered not only as the direct victims of war, but also from the loss of their homes, the workplaces that gave them an income and produced useful goods, and the farms that supplied food. They also experienced the unsanitary conditions that resulted from bombing.

PRIMARY SOURCE

INTERACTIVE

Displaced Persons

Laura de Gozdawa Turczynowicz, an American married to a Polish nobleman, described fleeing the advance of the German army into Suwalki, Poland.

At the [Vilno] station were crowds of Suwaki people. One man of our acquaintance had brought with him only his walking stick! Another man had become separated from his young son, fourteen, and daughter, sixteen, . . . and the poor father was on the verge of losing his reason. . . .

Such a lot of people came for help that my money melted like snow in the sunshine. I took just as many as could be packed in our [hotel] rooms. . . .

The next day dragged wearily along, everybody waiting, living only to hear better news. The city was rapidly filling with refugees. In one place, an old convent, they were given a roof to sleep under, and hot tea.

DOCUMENT-BASED QUESTION

Under what conditions did the Polish refugees flee from the Germans?

PRIMARY SOURCE

INTERACTIVE

Atomic Bomb

In this excerpt, Dr. Tatsuichiro Akizuki describes the people who began arriving at his hospital in Nagasaki the day the bomb was dropped.

It was all he could do to keep standing. Yet it didn't occur to me that he had been seriously injured. . . .

As time passed, more and more people in a similar plight came up to the hospital . . . All were of the same appearance, sounded the same. "I'm hurt, hurt! I'm burning! Water!" They all moaned the same lament. . . . [T]hey walked with strange, slow steps, groaning from deep inside themselves as if they had travelled from the depths of hell. They looked whitish; their faces were like masks.

DOCUMENT-BASED QUESTION

Why did the doctor not recognize his patients' symptoms?

PRIMARY SOURCE

Internment Camps

After Pearl Harbor, thousands of Japanese Americans were sent to internment camps mainly located in the western United States.

DOCUMENT-BASED QUESTION

Judging from the photograph, what was the government's attitude toward Japanese Americans?



Comparing & Contrasting

- Given the conditions described during trench warfare and on Iwo Jima, why would soldiers continue to fight?
- How were the human costs of war, military and civilian, similar to each other? How were they different?
- Given what you have read on these pages, if another world war broke out, would you prefer to be in the military or to be a civilian? Why?

EXTENSION ACTIVITY

Look up the numbers of civilian casualties suffered in different countries during World War II in an encyclopedia or other reference source. Use the graph on page 958 as a model. Be sure to include the countries with the most significant figures in different parts of the world. Write a paragraph explaining why these countries had the greatest number of casualties.

UNIT
8

Perspectives On the Present

1945–present





On November 10, 1989, all borders between East and West Germany were opened. Here, people celebrate in front of the Brandenburg Gate, one of the former border crossings between East and West.

Comparing & Contrasting

Nation Building

In Unit 8, you will learn about the emergence or growth of several different nations. At the end of the unit, you will have a chance to compare and contrast the nations you have studied. (See pages 1100–1105.)