Global Impact: Arming for War

The Atomic Bomb

On the eve of World War II, scientists in Germany succeeded in splitting the nucleus of a uranium atom, releasing a huge amount of energy. Albert Einstein wrote to President Franklin Roosevelt and warned him that Nazi Germany might be working to develop atomic weapons. Roosevelt responded by giving his approval for an American program, later code-named the Manhattan Project, to develop an atomic bomb. Roosevelt’s decision set off a race to ensure that the United States would be the first to develop the bomb.

On the morning of August 6, 1945, the B-29 bomber Enola Gay, flown by Colonel Paul W. Tibbets, Jr., took off from Tinian Island in the Mariana Islands.

Patterns of Interaction

Arming for War: Modern and Medieval Weapons

Just as in World War I, the conflicts of World War II spurred the development of ever more powerful weapons. Mightier tanks, more elusive submarines, faster fighter planes—all emerged from this period. From ancient times to the present day, the pattern remains the same: Every new weapon causes other countries to develop weapons of similar or greater force. This pattern results in a deadly race for an ultimate weapon: for example, the atomic bomb.

Nagasaki citizens trudge through the still smoldering ruins of their city in this photograph by Yosuke Yamahata.

Hiroshima: Day of Fire

Impact of the Bombing

<table>
<thead>
<tr>
<th>Impact of the Bombing</th>
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<tbody>
<tr>
<td>Ground temperatures</td>
<td>7,000°F</td>
</tr>
<tr>
<td>Hurricane force winds</td>
<td>980 mph</td>
</tr>
<tr>
<td>Energy released</td>
<td>20,000 tons of TNT</td>
</tr>
<tr>
<td>Buildings destroyed</td>
<td>62,000 buildings</td>
</tr>
<tr>
<td>Killed immediately</td>
<td>70,000 people</td>
</tr>
<tr>
<td>Dead by the end of 1945</td>
<td>140,000 people</td>
</tr>
<tr>
<td>Total deaths related to A-bomb</td>
<td>200,000 people</td>
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The overwhelming destructive power of the Hiroshima bomb, and of the bomb dropped on Nagasaki three days later, changed the nature of war forever. Nuclear destruction also led to questions about the ethics of scientists and politicians who chose to develop and use the bomb.

1. Making Inferences What advantages did the United States have over Germany in the race to develop the atomic bomb?


2. Comparing and Contrasting If you were to design a memorial to the victims of the Hiroshima and Nagasaki bombings, what symbol would you use? Make a sketch of your memorial.
FC.137 WORLD WAR II IN THE PACIFIC (1937-45)

Stalemate between Japan & China (FC.135)

Hitler fails to keep Japan informed of his plans vs. Russia (FC.135)

France & Britain distracted by war in Eur. (FC.136)

Japan plans to conquer SE Asia & set up Greater E. Asia Co-Prosperity sphere to discredit Eur. powers & gain economic control of E. Asia

US cuts oil supplies to Japan to force it to stop expansion (1941)

Japan launches surprise attack on US naval base at Pearl Harbor in Hawaii (12/7/1941)

Nearly unbroken string of Japanese victories in early 1942 →
Mounting problems for Japan:

- Huge island empire → hard to supply or concentrate its forces
- Japanese over-confidence contributes to major naval defeat at Midway (June, 1942)
- US war prod. → huge numbers of ships & planes in S. Pacific

US submarines ravage Japan's unprotected shipping

US & allies drive Japanese back island by island → in range to bomb Japanese cities

Japan worn down by enemy's numbers & firepower

US wants to win the war before Stalin can intervene in E. Asia

Allies poised to invade Japan by mid 1945, but worried about massive casualties they would suffer

US develops & tests 1st atomic bomb (7/16/1945)

Atomic bombs devastate Hiroshima (8/6/45) & Nagasaki (8/9/45) but not before Stalin declares war on Japan (8/8/45)

Japan surrenders (9/2/1945)

Civil war in China resumes → Comm.'s take over (FC.147)

Tensions b/w US & SU resume → Cold War (FC.138)

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