Was the Dropping of Atomic Weapons on Japan an Appropriate Use of Force?



This inquiry leads students through an investigation of the decision by the United States to use atomic weapons on Japan at the end of World War II. This inquiry relates to the following C3 standards: D2.His.16.9-12: Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.

D3.3.9-12: Identify evidence that draws information directly and substantively from multiple sources to detect inconsistencies in evidence in order to revise or strengthen claims.).

The compelling question "Was the Dropping of Atomic Weapons on Japan an Appropriate Use of Force?" asks students to identify and weigh evidence from multiple primary and secondary sources supplied as well as others found by the student.

This inquiry delves into a question that educated and informed scholars have disagreed on for decades.

Students will consider three key questions as they progress through the primary and secondary resource set:

- 1. What was the impact of the use of Atomic weapons on Japan?
- 2. How does the the impact of the use of atomic weapons on Japan compare with other attacks on on civilians during World War II?

- 3. What reasons are given indicating that the use of atomic weapons on Japan was necessary?
- 4. What are the reasons the use of atomic weapons on Japan was unjustified?

NOTE: Before entering this inquiry, students should have developed some basic background information about the major players and course of World War II.

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Supporting Questions

- 1. What was the impact of the use of Atomic weapons on Japan?
- 2. How does the the impact of the use of atomic weapons on Japan compare with other attacks on on civilians during World War II?
- 3. What reasons are given indicating that the use of atomic weapons on Japan was necessary?
- 4. What are the reasons the use of atomic weapons on Japan was unjustified?

Was the Dropping of Atomic Weapons on Japan an Appropriate Use of Force?	
Inquiry Standard	D2.His.16.9-12: Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.
	D3.3.9-12: Identify evidence that draws information directly and substantively from multiple sources to detect inconsistencies in evidence in order to revise or strengthen claims.
Staging the Compelling Question	In small groups, have students come up with ideas from their lives, the news, or history when something has been done that is normally considered bad but was justified due to circumstances.
	Have groups shared their examples with other groups or the whole class and consider if the justifications shared are reasonable and appropriate.
	Optional: Engage in a brief class discussion about whether or not there are absolutes when considering what is right and wrong and/or good and evil.
	Have students will watch the following two videos:
	Was it Wrong to Drop the Atom Bomb on Japan?
	Hiroshima atomic bomb: Survivor recalls horrors - BBC News

What was the impact of the use of Atomic weapons on Japan?

Formative Performance Task

Describe the effects of the use of atomic weapons on Japan.

Featured Sources

Source A: General
Description of Damage
Caused by the Atomic
Explosions Source B:
Hiroshima Source C:
Nagasaki Source D:
Destructive Effects

Supporting Question 2

How does the the impact of the use of atomic weapons on Japan compare with other attacks on on civilians during World War II?

Formative Performance Task

Analyze the documents in this set to compare the impact of the atomic bombing of Hiroshima and Nagasaki with attacks on civilians earlier in World War II.

Featured Sources

Source A: General
Description of Damage
Caused by the Atomic
Explosions Source B:
Nanjing Massacre Source
C: Bombing of Dresden
Source D: Tokyo vs.
Hiroshima Source E: Why
Agonize Over Hiroshima,
Not Dresden?

Supporting Question 3

What reasons are given indicating that the use of atomic weapons on Japan was necessary?

Formative Performance Task

According to the documents in this set, what are the reasons the use of atomic weapons on Japan was necessary?

Featured Sources

Source A: Was the Atomic Bombing of Japan Necessary? Source B: America's Atomic Atrocity Source C: Memorandum on the Use of S-1 Bomb

Supporting Question 4

What are the reasons the use of atomic weapons on Japan was unjustified?

Formative Performance Task

Teachers will be able to assess students' ability to find corroborating evidence in multiple documents.

Featured Sources

Source A: All documents in inquiry set.

ARGUMENT

Present an argument related to the question, "Was the dropping of atomic weapons on Japan an appropriate use of force?" Be sure to include specific claims and relevant evidence from the sources in this inquiry task's document sets as well as any other source you find and deed relevant to your argument.

Summative Performance Task

EXTENSION

Engage in a class debate on this topic using evidence to support claims about the appropriateness of using atomic weapons on Japan at the end of World War II.

UNDERSTAND

Taking Informed Action

Students should understand that using force against another nation, especially when civilians are impacted, is not something to take lightly. Whether or not to use of force should be meticulously analyzed and debated since the ramifications may be tremendous.

ASSESS

Students will determine their own guidelines for when it is appropriate to use force against other nations.

ACTION

Students will share their individual guidelines for the use of force and work to come to class consensus on guidelines all can support. The consensus guidelines will be put in a document for all students to sign and then send to their Congressperson.

Overview

Inquiry Description

This inquiry leads students through an investigation of the decision by the United States to use atomic weapons on Japan at the end of World War II.

The compelling question "Was the Dropping of Atomic Weapons on Japan an Appropriate Use of Force?" asks students to identify and weigh evidence from multiple primary and secondary sources supplied as well as others found by the student. This inquiry delves into a question that educated and informed scholars have disagreed on for decades.

NOTE: Before entering this inquiry, students should have developed some basic background information about the major players and course of World War II.

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Structure

The document set for this inquiry was purposely selected to allow students to support arguments on both sides of the issue. The formative tasks are intended to get students to engage with and understand individual documents so they may identify corroborations and areas of dispute.

While content is important, the focus of this task is on the development of skills. Prior to engaging in this task students should have a basic understanding of World War II and the Manhattan project.

Staging the Compelling Question	
Compelling Question	Was the Dropping of Atomic Weapons on Japan an Appropriate Use of Force?
Featured Sources	 Source A: Was it Wrong to Drop the Atom Bomb on Japan? Source B: Hiroshima atomic bomb: Survivor recalls horrors - BBC News

Staging the compelling question

It is important to understand that decisions made in history are not made in a vacuum and knowledge, experiences, and circumstances often make seemingly black and white issues much more nuanced.

Compelling Question

Featured Source A Was it Wrong to Drop the Atom Bomb on Japan?

Excerpt

Video.

Source:

https://www.youtube.com/watch?v=BmIBbcxseXM

Compelling Question Featured Source B Hiroshima atomic bomb: Survivor recalls horrors - BBC News

Excerpt

Video.

Source:

https://www.youtube.com/watch?v=-07xiaBl2vk

Supporting Question 1	
Supporting Question	What was the impact of the use of Atomic weapons on Japan?
Formative Performance Task	Describe the effects of the use of atomic weapons on Japan.
Featured Sources	 Source A: General Description of Damage Caused by the Atomic Explosions Source B: Hiroshima Source C: Nagasaki Source D: Destructive Effects

It is important that students understand the the destructive power of the atomic bombs used at the end of World War II in order to engage in answering the overarching question of whether or not their use was justified.

Formative Performance Task

Students will use the document set to inform a description of the effects of the atomic bombs dropped on Hiroshima and Nagasaki.

Featured Source A

General Description of Damage Caused by the Atomic Explosions

Excerpt

In considering the devastation in the two cities, it should be remembered that the cities' differences in shape and topography resulted in great differences in the damages. Hiroshima was all on low, flat ground, and was roughly circular in shape; Nagasaki was much cut up by hills and mountain spurs, with no regularity to its shape.

In Hiroshima almost everything up to about one mile from X was completely destroyed, except for a small number (about 50) of heavily reinforced concrete buildings, most of which were specially designed to withstand earthquake shock, which were not collapsed by the blast; most of these buildings had their interiors completely gutted, and all windows, doors, sashes, and frames ripped out. In Nagasaki, nearly everything within 1/2 mile of the explosion was destroyed, including heavy structures. All Japanese homes were destroyed within 1/2 miles from X.

Underground air raid shelters with earth cover roofs immediately below the explosion had their roofs caved in; but beyond 1/2 mile from X they suffered no damage.

In Nagasaki, 1500 feet from X high quality steel frame buildings were not completely collapsed, but the entire buildings suffered mass distortion and all panels and roofs were blown in.

In Nagasaki, 2,000 feet from X, reinforced concrete buildings with 10" walls and 6" floors were collapsed; reinforced concrete buildings with 4" walls and roofs were standing but were badly damaged. At 2,000 feet some 9" concrete walls were completely destroyed.

In Nagasaki, 3,500 feet from X, church buildings with 18" brick walls were completely destroyed. 12" brick walls were severely cracked as far as 5,000 feet.

In Hiroshima, 4,400 feet from X, multi-story brick buildings were completely demolished. In Nagasaki, similar buildings were destroyed to 5,300 feet.

In Hiroshima, roof tiles were bubbled (melted) by the flash heat out to 4,000 feet from X; in Nagasaki, the same effect was observed to 6,500 feet.

In Hiroshima, steel frame buildings were destroyed 4,200 feet from X, and to 4,800 feet in Nagasaki.

In both cities, the mass distortion of large steel buildings was observed out to 4,500 feet from X.

In Nagasaki, reinforced concrete smoke stacks with 8" walls, specially designed to withstand earthquake shocks, were overturned up to 4,000 feet from X.

In Hiroshima, steel frame buildings suffered severe structural damage up to 5,700 feet from X, and in Nagasaki the same damage was sustained as far as 6,000 feet.

In Nagasaki, 9" brick walls were heavily cracked to 5,000 feet, were moderately cracked to 6,000 feet, and slightly cracked to 8,000 feet. In both cities, light concrete buildings collapsed out to 4,700 feet.

In Hiroshima, multi-story brick buildings suffered structural damage up to 6,600 feet, and in Nagasaki up to 6,500 feet from X.

In both cities overhead electric installations were destroyed up to 5,500 feet; and trolley cars were destroyed up to 5,500 feet, and damaged to 10,500 feet.

Flash ignition of dry, combustible material was observed as far as 6,400 feet from X in Hiroshima, and in Nagasaki as far as 10,000 feet from X.

Severe damage to gas holders occured out to 6,500 feet in both cities.

All Japanese homes were seriously damaged up to 6,500 feet in Hiroshima, and to 8,000 feet in Nagasaki. Most Japanese homes were damaged up to 8,000 feet in Hiroshima and 10,500 feet in Nagasaki.

The hillsides in Nagasaki were scorched by the flash radiation of heat as far as 8,000 feet from X; this scorching gave the hillsides the appearance of premature autumn.

In Nagasaki, very heavy plaster damage was observed in many buildings up to 9,000 feet; moderate damage was sustained as far as 12,000 feet, and light damage up to 15,000 feet.

The flash charring of wooden telegraph poles was observed up to 9,500 feet from X in Hiroshima, and to 11,000 feet in Nagasaki; some reports indicate flash burns as far as 13,000 feet from X in both places.

Severe displacement of roof tiles was observed up to 8,000 feet in Hiroshima, and to 10,000 feet in Nagasaki.

In Nagasaki, very heavy damage to window frames and doors was observed up to 8,000 feet, and light damage up to 12,000 feet.

Roofs and wall coverings on steel frame buildings were destroyed out to 11,000 feet.

Although the sources of many fires were difficult to trace accurately, it is believed that fires were started by primary heat radiation as far as 15,000 feet from X.

Roof damage extended as far as 16,000 feet from X in Hiroshima and in Nagasaki.

The actual collapse of buildings was observed at the extreme range of 23,000 feet from X in Nagasaki.

Although complete window damage was observed only up to 12,000 feet from X, some window damage occurred in Nagasaki up to 40,000 feet, and actual breakage of glass occurred up to 60,000 feet.

Heavy fire damage was sustained in a circular area in Hiroshima with a mean radius of about 6,000 feet and a maximum radius of about 11,000 feet; similar heavy damage occured in Nagasaki south of X up to 10,000 feet, where it was stopped on a river course.

In Hiroshima over 60,000 of 90,000 buildings were destroyed or severely damaged by the atomic bomb; this figure represents over 67% of the city's structures.

In Nagasaki 14,000 or 27% of 52,000 residences were completely destroyed and 5,400, or 10% were half destroyed. Only 12% remained undamaged. This destruction was limited by the layout of the city. The following is a summary of the damage to buildings in Nagasaki as determined from a ground survey made by the Japanese:

In Hiroshima, all utilities and transportation services were disrupted for varying lengths of time. In general however services were restored about as rapidly as they could be used by the depleted population. Through railroad service was in order in Hiroshima on 8 August, and electric power was available in most of the surviving parts on 7 August, the day after the bombing. The reservoir of the city was not damaged, being nearly 2 miles from X. However, 70,000 breaks in water pipes in buildings and dwellings were caused by the blast and fire effects. Rolling transportation suffered extensive damage. The damage to railroad tracks, and roads was comparatively small, however. The electric power transmission and distribution systems were badly wrecked. The telephone system was approximately 80% damaged, and no service was restored until 15 August.

Despite the customary Japanese lack of attention to sanitation measures, no major epidemic broke out in the bombed cities. Although the conditions following the bombings makes this fact seem surprising, the experience of other bombed cities in both Germany and Japan show Hiroshima and Nagasaki not to be isolated cases.

The atomic explosion over Nagasaki affected an over-all area of approximately 42.9 square miles of which about 8.5 square miles were water and only about 9.8 square miles were built up, the remainder being partially settled. Approximately 36% of the built up areas were seriously damaged. The area most severely damaged had an average radius of about 1 mile, and covered about 2.9 square miles of which 2.4 were built up.

In Nagasaki, buildings with structural steel frames, principally the Mitsubishi Plant as far as 6,000 feet from X were severely damaged; these buildings were typical of wartime mill construction in America and Great Britain, except that some of the frames were somewhat less substantial. The damage consisted of windows broken out (100%), steel sashes ripped out or bent, corrugated metal or corrugated asbestos roofs and sidings ripped off, roofs bent or destroyed, roof trusses collapsed, columns bent and cracked and concrete foundations for columns rotated. Damage to buildings with structural steel frames was more severe where the buildings received the effect of the blast on their sides than where the blast hit the ends of buildings, because the buildings had more stiffness (resistance to negative moment at the top of columns) in a longitudinal direction. Many of the lightly constructed steel frame buildings collapsed completely while some of the heavily constructed (to carry the weight of heavy cranes and loads) were stripped of roof and siding, but the frames were only partially injured.

The next most seriously damaged area in Nagasaki lies outside the 2.9 square miles just described, and embraces approximately 4.2 square miles of which 29% was built up. The damage from blast and fire was moderate here, but in some sections (portions of main business districts) many secondary fires started and spread rapidly, resulting in about as much over-all destruction as in areas much closer to X.

An area of partial damage by blast and fire lies just outside the one just described and comprises approximately 35.8 square miles. Of this area, roughly 1/6th was built up and 1/4th was water. The extent of damage varied from serious (severe damage to roofs and windows in the main business section of Nagasaki, 2.5 miles from X), to minor (broken or occasionally broken windows at a distance of 7 miles southeast of X).

As intended, the bomb was exploded at an almost ideal location over Nagasaki to do the maximum damage to industry, including the Mitsubishi Steel and Arms Works, the Mitsubishi-Urakami Ordnance Works (Torpedo Works), and numerous factories, factory training schools, and other industrial establishments, with a minimum destruction of dwellings and consequently, a minimum amount of casualties. Had the bomb been dropped farther south, the Mitsubishi-Urakami Ordnance Works would not have been so severely damaged, but the main business and residential districts of Nagasaki would have sustained much greater damage casualties.

Calculations show that the structural steel and reinforced concrete frames which survived the blast fairly close to X could not have withstood the estimated peak pressures developed against the total areas presented by the sides and roof of the buildings. The survival of these frames is explained by the fact that they were not actually required to withstand the peak pressure because the windows were quickly knocked out and roof and siding stripped off thereby reducing total area and relieving the pressure. While this saved the building frame, it permitted severe damage to building interior and contents, and injuries to the building occupants. Buildings without large panel openings through which the pressure could dissipate were completely crushed, even when their frames were as strong as those which survived.

The damage sustained by reinforced concrete buildings depended both on the proximity to X and the type and strength of the reinforced concrete construction. Some of the buildings with reinforced concrete frames also had reinforced concrete walls, ceilings, and partitions, while others had brick or concrete tile walls covered either with plaster or ornamental stone, with partitions of metal, glass, and plaster. With the exception of the Nagasaki Medical School and Hospital group, which was designed to withstand earthquakes and was therefore of heavier construction than most American structures, most of the reinforced concrete structures could be classified only as fair, with concrete of low strength and density, with many of the columns, beams, and slabs underdesigned and improperly reinforced. These facts account for some of the structural failures which occured.

In general, the atomic bomb explosion damaged all windows and ripped out, bent, or twisted most of the steel window or door sashes, ripped doors from hinges, damaged all suspended wood, metal, and plaster ceilings. The blast concussion also caused great damage to equipment by tumbling and battering. Fires generally of secondary origin consumed practically all combustible material, caused plaster to crack off, burned all wooden trim, stair covering, wooden frames of wooden suspended ceilings, beds, mattresses, and mats, and fused glass, ruined all equipment not already destroyed by the blast, ruined all electrical wiring, plumbing, and caused spalling of concrete columns and beams in many of the rooms.

Almost without exception masonry buildings of either brick or stone within the effective limits of the blast

were severely damaged so that most of them were flattened or reduced to rubble. The wreckage of a church, approximately 1,800 feet east of X in Nagasaki, was one of the few masonry buildings still recognizable and only portions of the walls of this structure were left standing. These walls were extremely thick (about 2 feet). The two domes of the church had reinforced concrete frames and although they were toppled, they held together as units.

Practically every wooden building or building with timber frame within 2.0 miles of X was either completely destroyed or very seriously damaged, and significant damage in Nagasaki resulted as far as 3 miles from X. Nearly all such buildings collapsed and a very large number were consumed by fire.

A reference to the various photographs depicting damage shows that although most of the buildings within the effective limits of the blast were totally destroyed or severely damaged, a large number of chimneys even close to X were left standing, apparently uninjured by the concussion. One explanation is that concrete chimneys are approximately cylindrical in shape and consequently offer much less wind resistance than flat surfaces such as buildings. Another explanation is that since the cities were subject to typhoons the more modern chimneys were probably designed to withstand winds of high velocity. It is also probable that most of the recently constructed chimneys as well as the more modern buildings were constructed to withstand the acceleration of rather severe earthquakes. Since the bombs were exploded high in the air, chimneys relatively close to X were subjected to more of a downward than a lateral pressure, and consequently the overturning moment was much less than might have been anticipated.

Although the blast damaged many bridges to some extent, bridge damage was on the whole slight in comparison to that suffered by buildings. The damage varied from only damaged railings to complete destruction of the superstructure. Some of the bridges were wrecked and the spans were shoved off their piers and into the river bed below by the force of the blast. Others, particularly steel plate girder bridges, were badly buckled by the blast pressure. None of the failures observed could be attributed to inadequate design or structural weaknesses.

The roads, and railroad and street railway trackage sustained practically no primary damage as a result of the explosion. Most of the damage to railroads occurred from secondary causes, such as fires and damage to bridges or other structures. Rolling stock, as well as automobiles, trolleys, and buses were destroyed and burned up to a considerable distance from X. Streets were impassable for awhile because of the debris, but they were not damaged. The height of the bomb explosion probably explains the absence of direct damage to railroads and roads.

A large part of the electric supply was interrupted by the bomb blast chiefly through damage to electric substations and overhead transmission systems. Both gas works in Nagasaki were severely damaged by the bomb. These works would have required 6-7 months to get into operation. In addition to the damage sustained by the electrical and gas systems, severe damage to the water supply system was reported by the Japanese government; the chief damage was a number of breaks in the large water mains and in almost all of the distributing pipes in the areas which were affected by the blast. Nagasaki was still suffering from a water shortage inside the city six weeks after the atomic attack.

The Nagasaki Prefectural report describes vividly the effects of the bomb on the city and its inhabitants:

"Within a radius of 1 kilometer from X, men and animals died almost instantaneously and outside a radius of 1 kilometer and within a radius of 2 kilometers from X, some men and animals died instantly from the great blast and heat but the great majority were seriously or superficially injured. Houses and other structures were completely destroyed while fires broke out everywhere. Trees were uprooted and withered by the heat.

"Outside a radius of 2 kilometers and within a radius of 4 kilometers from X, men and animals suffered various degrees of injury from window glass and other fragments scattered about by the blast and many were burned by the intense heat. Dwellings and other structures were half damaged by blast.

"Outside a radius of 4 kilometers and within a radius of 8 kilometers living creatures were injured by materials blown about by the blast; the majority were only superficially wounded. Houses were only half or partially damaged."

The British Mission to Japan interpreted their observations of the destruction of buildings to apply to similar

construction of their own as follows:

A similar bomb exploding in a similar fashion would produce the following effects on normal British houses:

Up to 1,000 yards from X it would cause complete collapse.

Up to 1 mile from X it would damage the houses beyond repair.

Up to 1.5 miles from X it would render them uninhabitable without extensive repair, particularly to roof timbers.

Up to 2.5 miles from X it would render them uninhabitable until first-aid repairs had been carried out.

The fire damage in both cities was tremendous, but was more complete in Hiroshima than in Nagasaki. The effect of the fires was to change profoundly the appearance of the city and to leave the central part bare, except for some reinforced concrete and steel frames and objects such as safes, chimney stacks, and pieces of twisted sheet metal. The fire damage resulted more from the properties of the cities themselves than from those of the bombs.

The conflagration in Hiroshima caused high winds to spring up as air was drawn in toward the center of the burning area, creating a "fire storm". The wind velocity in the city had been less than 5 miles per hour before the bombing, but the fire-wind attained a velocity of 30-40 miles per hour. These great winds restricted the perimeter of the fire but greatly added to the damage of the conflagration within the perimeter and caused the deaths of many persons who might otherwise have escaped. In Nagasaki, very severe damage was caused by fires, but no extensive "fire storm" engulfed the city. In both cities, some of the fires close to X were no doubt started by the ignition of highly combustible material such as paper, straw, and dry cloth, upon the instantaneous radiation of heat from the nuclear explosion. The presence of large amounts of unburnt combustible materials near X, however, indicated that even though the heat of the blast was very intense, its duration was insufficient to raise the temperature of many materials to the kindling point except in cases where conditions were ideal. The majority of the fires were of secondary origin starting from the usual electrical short-circuits, broken gas lines, overturned stoves, open fires, charcoal braziers, lamps, etc., following collapse or serious damage from the direct blast.

Fire fighting and rescue units were stripped of men and equipment. Almost 30 hours elapsed before any rescue parties were observable. In Hiroshima only a handful of fire engines were available for fighting the ensuing fires, and none of these were of first class type. In any case, however, it is not likely that any fire fighting equipment or personnel or organization could have effected any significant reduction in the amount of damage caused by the tremendous conflagration.

A study of numerous aerial photographs made prior to the atomic bombings indicates that between 10 June and 9 August 1945 the Japanese constructed fire breaks in certain areas of the cities in order to control large scale fires. In general these fire breaks were not effective because fires were started at so many locations simultaneously. They appear, however, to have helped prevent fires from spreading farther east into the main business and residential section of Nagasaki.

Source:

"The Atomic Bombings of Hiroshima and Nagasaki." General Description of Damage Caused by the Atomic Explosions. AJ Software & Multimedia, n.d. Web. 12 Jan. 2016. .

Featured Source B

Hiroshima



"Hiroshima Panorama 2." Hiroshima Panorama 2. N.p., n.d. Web. 23 Sept. 2015.

Featured Source C

Nagasaki



"Nagasaki Bomb Museum Shows 26 New Photos | The Japan Times." Japan Times RSS. Web. 23 Sept. 2015.

Supporting Question 1 Featured Source D Destructive Effects

Excerpt

http://www.atomicbombmuseum.org/3 radioactivity.sh..

Source:

 $"Destructive\ Effects."\ AtomicBombMuseum.org.\ N.p.,\ n.d.\ Web.\ 12\ Jan.\ 2016.$

Supporting Question 2	
Supporting Question	How does the the impact of the use of atomic weapons on Japan compare with other attacks on on civilians during World War II?
Formative Performance Task	Analyze the documents in this set to compare the impact of the atomic bombing of Hiroshima and Nagasaki with attacks on civilians earlier in World War II.
Featured Sources	 Source A: General Description of Damage Caused by the Atomic Explosions Source B: Nanjing Massacre Source C: Bombing of Dresden Source D: Tokyo vs. Hiroshima Source E: Why Agonize Over Hiroshima, Not Dresden?

Students will analyze the document set to make a comparison between the atomic bombings of Hiroshima and Japan and conventional bombing attacks during World War II.

Formative Performance Task

In order to better understand the context in which the decision to use atomic weapons was made, students will make a comparison between the atomic bombings of Hiroshima and Nagasaki and other attacks on civilian populations by analyzing the documents in this set.

Featured Source A

General Description of Damage Caused by the Atomic Explosions

Excerpt

In considering the devastation in the two cities, it should be remembered that the cities' differences in shape and topography resulted in great differences in the damages. Hiroshima was all on low, flat ground, and was roughly circular in shape; Nagasaki was much cut up by hills and mountain spurs, with no regularity to its shape.

In Hiroshima almost everything up to about one mile from X was completely destroyed, except for a small number (about 50) of heavily reinforced concrete buildings, most of which were specially designed to withstand earthquake shock, which were not collapsed by the blast; most of these buildings had their interiors completely gutted, and all windows, doors, sashes, and frames ripped out. In Nagasaki, nearly everything within 1/2 mile of the explosion was destroyed, including heavy structures. All Japanese homes were destroyed within 1/2 miles from X.

Underground air raid shelters with earth cover roofs immediately below the explosion had their roofs caved in; but beyond 1/2 mile from X they suffered no damage.

In Nagasaki, 1500 feet from X high quality steel frame buildings were not completely collapsed, but the entire buildings suffered mass distortion and all panels and roofs were blown in.

In Nagasaki, 2,000 feet from X, reinforced concrete buildings with 10" walls and 6" floors were collapsed; reinforced concrete buildings with 4" walls and roofs were standing but were badly damaged. At 2,000 feet some 9" concrete walls were completely destroyed.

In Nagasaki, 3,500 feet from X, church buildings with 18" brick walls were completely destroyed. 12" brick walls were severely cracked as far as 5,000 feet.

In Hiroshima, 4,400 feet from X, multi-story brick buildings were completely demolished. In Nagasaki, similar buildings were destroyed to 5,300 feet.

In Hiroshima, roof tiles were bubbled (melted) by the flash heat out to 4,000 feet from X; in Nagasaki, the same effect was observed to 6,500 feet.

In Hiroshima, steel frame buildings were destroyed 4,200 feet from X, and to 4,800 feet in Nagasaki.

In both cities, the mass distortion of large steel buildings was observed out to 4,500 feet from X.

In Nagasaki, reinforced concrete smoke stacks with 8" walls, specially designed to withstand earthquake shocks, were overturned up to 4,000 feet from X.

In Hiroshima, steel frame buildings suffered severe structural damage up to 5,700 feet from X, and in Nagasaki the same damage was sustained as far as 6,000 feet.

In Nagasaki, 9" brick walls were heavily cracked to 5,000 feet, were moderately cracked to 6,000 feet, and slightly cracked to 8,000 feet. In both cities, light concrete buildings collapsed out to 4,700 feet.

In Hiroshima, multi-story brick buildings suffered structural damage up to 6,600 feet, and in Nagasaki up to 6,500 feet from X.

In both cities overhead electric installations were destroyed up to 5,500 feet; and trolley cars were destroyed up to 5,500 feet, and damaged to 10,500 feet.

Flash ignition of dry, combustible material was observed as far as 6,400 feet from X in Hiroshima, and in Nagasaki as far as 10,000 feet from X.

Severe damage to gas holders occured out to 6,500 feet in both cities.

All Japanese homes were seriously damaged up to 6,500 feet in Hiroshima, and to 8,000 feet in Nagasaki. Most Japanese homes were damaged up to 8,000 feet in Hiroshima and 10,500 feet in Nagasaki.

The hillsides in Nagasaki were scorched by the flash radiation of heat as far as 8,000 feet from X; this scorching gave the hillsides the appearance of premature autumn.

In Nagasaki, very heavy plaster damage was observed in many buildings up to 9,000 feet; moderate damage was sustained as far as 12,000 feet, and light damage up to 15,000 feet.

The flash charring of wooden telegraph poles was observed up to 9,500 feet from X in Hiroshima, and to 11,000 feet in Nagasaki; some reports indicate flash burns as far as 13,000 feet from X in both places.

Severe displacement of roof tiles was observed up to 8,000 feet in Hiroshima, and to 10,000 feet in Nagasaki.

In Nagasaki, very heavy damage to window frames and doors was observed up to 8,000 feet, and light damage up to 12,000 feet.

Roofs and wall coverings on steel frame buildings were destroyed out to 11,000 feet.

Although the sources of many fires were difficult to trace accurately, it is believed that fires were started by primary heat radiation as far as 15,000 feet from X.

Roof damage extended as far as 16,000 feet from X in Hiroshima and in Nagasaki.

The actual collapse of buildings was observed at the extreme range of 23,000 feet from X in Nagasaki.

Although complete window damage was observed only up to 12,000 feet from X, some window damage occurred in Nagasaki up to 40,000 feet, and actual breakage of glass occurred up to 60,000 feet.

Heavy fire damage was sustained in a circular area in Hiroshima with a mean radius of about 6,000 feet and a maximum radius of about 11,000 feet; similar heavy damage occured in Nagasaki south of X up to 10,000 feet, where it was stopped on a river course.

In Hiroshima over 60,000 of 90,000 buildings were destroyed or severely damaged by the atomic bomb; this figure represents over 67% of the city's structures.

In Nagasaki 14,000 or 27% of 52,000 residences were completely destroyed and 5,400, or 10% were half destroyed. Only 12% remained undamaged. This destruction was limited by the layout of the city. The following is a summary of the damage to buildings in Nagasaki as determined from a ground survey made by the Japanese:

In Hiroshima, all utilities and transportation services were disrupted for varying lengths of time. In general however services were restored about as rapidly as they could be used by the depleted population. Through railroad service was in order in Hiroshima on 8 August, and electric power was available in most of the surviving parts on 7 August, the day after the bombing. The reservoir of the city was not damaged, being nearly 2 miles from X. However, 70,000 breaks in water pipes in buildings and dwellings were caused by the blast and fire effects. Rolling transportation suffered extensive damage. The damage to railroad tracks, and roads was comparatively small, however. The electric power transmission and distribution systems were badly wrecked. The telephone system was approximately 80% damaged, and no service was restored until 15 August.

Despite the customary Japanese lack of attention to sanitation measures, no major epidemic broke out in the bombed cities. Although the conditions following the bombings makes this fact seem surprising, the experience of other bombed cities in both Germany and Japan show Hiroshima and Nagasaki not to be isolated cases.

The atomic explosion over Nagasaki affected an over-all area of approximately 42.9 square miles of which about 8.5 square miles were water and only about 9.8 square miles were built up, the remainder being partially settled. Approximately 36% of the built up areas were seriously damaged. The area most severely damaged had an average radius of about 1 mile, and covered about 2.9 square miles of which 2.4 were built up.

In Nagasaki, buildings with structural steel frames, principally the Mitsubishi Plant as far as 6,000 feet from X were severely damaged; these buildings were typical of wartime mill construction in America and Great Britain, except that some of the frames were somewhat less substantial. The damage consisted of windows broken out (100%), steel sashes ripped out or bent, corrugated metal or corrugated asbestos roofs and sidings ripped off, roofs bent or destroyed, roof trusses collapsed, columns bent and cracked and concrete foundations for columns rotated. Damage to buildings with structural steel frames was more severe where the buildings received the effect of the blast on their sides than where the blast hit the ends of buildings, because the buildings had more stiffness (resistance to negative moment at the top of columns) in a longitudinal direction. Many of the lightly constructed steel frame buildings collapsed completely while some of the heavily constructed (to carry the weight of heavy cranes and loads) were stripped of roof and siding, but the frames were only partially injured.

The next most seriously damaged area in Nagasaki lies outside the 2.9 square miles just described, and embraces approximately 4.2 square miles of which 29% was built up. The damage from blast and fire was moderate here, but in some sections (portions of main business districts) many secondary fires started and spread rapidly, resulting in about as much over-all destruction as in areas much closer to X.

An area of partial damage by blast and fire lies just outside the one just described and comprises approximately 35.8 square miles. Of this area, roughly 1/6th was built up and 1/4th was water. The extent of damage varied from serious (severe damage to roofs and windows in the main business section of Nagasaki, 2.5 miles from X), to minor (broken or occasionally broken windows at a distance of 7 miles southeast of X).

As intended, the bomb was exploded at an almost ideal location over Nagasaki to do the maximum damage to industry, including the Mitsubishi Steel and Arms Works, the Mitsubishi-Urakami Ordnance Works (Torpedo Works), and numerous factories, factory training schools, and other industrial establishments, with a minimum destruction of dwellings and consequently, a minimum amount of casualties. Had the bomb been dropped farther south, the Mitsubishi-Urakami Ordnance Works would not have been so severely damaged, but the main business and residential districts of Nagasaki would have sustained much greater damage casualties.

Calculations show that the structural steel and reinforced concrete frames which survived the blast fairly close to X could not have withstood the estimated peak pressures developed against the total areas presented by the sides and roof of the buildings. The survival of these frames is explained by the fact that they were not actually required to withstand the peak pressure because the windows were quickly knocked out and roof and siding stripped off thereby reducing total area and relieving the pressure. While this saved the building frame, it permitted severe damage to building interior and contents, and injuries to the building occupants. Buildings without large panel openings through which the pressure could dissipate were completely crushed, even when their frames were as strong as those which survived.

The damage sustained by reinforced concrete buildings depended both on the proximity to X and the type and strength of the reinforced concrete construction. Some of the buildings with reinforced concrete frames also had reinforced concrete walls, ceilings, and partitions, while others had brick or concrete tile walls covered either with plaster or ornamental stone, with partitions of metal, glass, and plaster. With the exception of the Nagasaki Medical School and Hospital group, which was designed to withstand earthquakes and was therefore of heavier construction than most American structures, most of the reinforced concrete structures could be classified only as fair, with concrete of low strength and density, with many of the columns, beams, and slabs underdesigned and improperly reinforced. These facts account for some of the structural failures which occured.

In general, the atomic bomb explosion damaged all windows and ripped out, bent, or twisted most of the steel window or door sashes, ripped doors from hinges, damaged all suspended wood, metal, and plaster ceilings. The blast concussion also caused great damage to equipment by tumbling and battering. Fires generally of secondary origin consumed practically all combustible material, caused plaster to crack off, burned all wooden trim, stair covering, wooden frames of wooden suspended ceilings, beds, mattresses, and mats, and fused glass, ruined all equipment not already destroyed by the blast, ruined all electrical wiring, plumbing, and caused spalling of concrete columns and beams in many of the rooms.

Almost without exception masonry buildings of either brick or stone within the effective limits of the blast

were severely damaged so that most of them were flattened or reduced to rubble. The wreckage of a church, approximately 1,800 feet east of X in Nagasaki, was one of the few masonry buildings still recognizable and only portions of the walls of this structure were left standing. These walls were extremely thick (about 2 feet). The two domes of the church had reinforced concrete frames and although they were toppled, they held together as units.

Practically every wooden building or building with timber frame within 2.0 miles of X was either completely destroyed or very seriously damaged, and significant damage in Nagasaki resulted as far as 3 miles from X. Nearly all such buildings collapsed and a very large number were consumed by fire.

A reference to the various photographs depicting damage shows that although most of the buildings within the effective limits of the blast were totally destroyed or severely damaged, a large number of chimneys even close to X were left standing, apparently uninjured by the concussion. One explanation is that concrete chimneys are approximately cylindrical in shape and consequently offer much less wind resistance than flat surfaces such as buildings. Another explanation is that since the cities were subject to typhoons the more modern chimneys were probably designed to withstand winds of high velocity. It is also probable that most of the recently constructed chimneys as well as the more modern buildings were constructed to withstand the acceleration of rather severe earthquakes. Since the bombs were exploded high in the air, chimneys relatively close to X were subjected to more of a downward than a lateral pressure, and consequently the overturning moment was much less than might have been anticipated.

Although the blast damaged many bridges to some extent, bridge damage was on the whole slight in comparison to that suffered by buildings. The damage varied from only damaged railings to complete destruction of the superstructure. Some of the bridges were wrecked and the spans were shoved off their piers and into the river bed below by the force of the blast. Others, particularly steel plate girder bridges, were badly buckled by the blast pressure. None of the failures observed could be attributed to inadequate design or structural weaknesses.

The roads, and railroad and street railway trackage sustained practically no primary damage as a result of the explosion. Most of the damage to railroads occurred from secondary causes, such as fires and damage to bridges or other structures. Rolling stock, as well as automobiles, trolleys, and buses were destroyed and burned up to a considerable distance from X. Streets were impassable for awhile because of the debris, but they were not damaged. The height of the bomb explosion probably explains the absence of direct damage to railroads and roads.

A large part of the electric supply was interrupted by the bomb blast chiefly through damage to electric substations and overhead transmission systems. Both gas works in Nagasaki were severely damaged by the bomb. These works would have required 6-7 months to get into operation. In addition to the damage sustained by the electrical and gas systems, severe damage to the water supply system was reported by the Japanese government; the chief damage was a number of breaks in the large water mains and in almost all of the distributing pipes in the areas which were affected by the blast. Nagasaki was still suffering from a water shortage inside the city six weeks after the atomic attack.

The Nagasaki Prefectural report describes vividly the effects of the bomb on the city and its inhabitants:

"Within a radius of 1 kilometer from X, men and animals died almost instantaneously and outside a radius of 1 kilometer and within a radius of 2 kilometers from X, some men and animals died instantly from the great blast and heat but the great majority were seriously or superficially injured. Houses and other structures were completely destroyed while fires broke out everywhere. Trees were uprooted and withered by the heat.

"Outside a radius of 2 kilometers and within a radius of 4 kilometers from X, men and animals suffered various degrees of injury from window glass and other fragments scattered about by the blast and many were burned by the intense heat. Dwellings and other structures were half damaged by blast.

"Outside a radius of 4 kilometers and within a radius of 8 kilometers living creatures were injured by materials blown about by the blast; the majority were only superficially wounded. Houses were only half or partially damaged."

The British Mission to Japan interpreted their observations of the destruction of buildings to apply to similar

construction of their own as follows:

A similar bomb exploding in a similar fashion would produce the following effects on normal British houses:

Up to 1,000 yards from X it would cause complete collapse.

Up to 1 mile from X it would damage the houses beyond repair.

Up to 1.5 miles from X it would render them uninhabitable without extensive repair, particularly to roof timbers.

Up to 2.5 miles from X it would render them uninhabitable until first-aid repairs had been carried out.

The fire damage in both cities was tremendous, but was more complete in Hiroshima than in Nagasaki. The effect of the fires was to change profoundly the appearance of the city and to leave the central part bare, except for some reinforced concrete and steel frames and objects such as safes, chimney stacks, and pieces of twisted sheet metal. The fire damage resulted more from the properties of the cities themselves than from those of the bombs.

The conflagration in Hiroshima caused high winds to spring up as air was drawn in toward the center of the burning area, creating a "fire storm". The wind velocity in the city had been less than 5 miles per hour before the bombing, but the fire-wind attained a velocity of 30-40 miles per hour. These great winds restricted the perimeter of the fire but greatly added to the damage of the conflagration within the perimeter and caused the deaths of many persons who might otherwise have escaped. In Nagasaki, very severe damage was caused by fires, but no extensive "fire storm" engulfed the city. In both cities, some of the fires close to X were no doubt started by the ignition of highly combustible material such as paper, straw, and dry cloth, upon the instantaneous radiation of heat from the nuclear explosion. The presence of large amounts of unburnt combustible materials near X, however, indicated that even though the heat of the blast was very intense, its duration was insufficient to raise the temperature of many materials to the kindling point except in cases where conditions were ideal. The majority of the fires were of secondary origin starting from the usual electrical short-circuits, broken gas lines, overturned stoves, open fires, charcoal braziers, lamps, etc., following collapse or serious damage from the direct blast.

Fire fighting and rescue units were stripped of men and equipment. Almost 30 hours elapsed before any rescue parties were observable. In Hiroshima only a handful of fire engines were available for fighting the ensuing fires, and none of these were of first class type. In any case, however, it is not likely that any fire fighting equipment or personnel or organization could have effected any significant reduction in the amount of damage caused by the tremendous conflagration.

A study of numerous aerial photographs made prior to the atomic bombings indicates that between 10 June and 9 August 1945 the Japanese constructed fire breaks in certain areas of the cities in order to control large scale fires. In general these fire breaks were not effective because fires were started at so many locations simultaneously. They appear, however, to have helped prevent fires from spreading farther east into the main business and residential section of Nagasaki.

Source:

"The Atomic Bombings of Hiroshima and Nagasaki." General Description of Damage Caused by the Atomic Explosions. AJ Software & Multimedia, n.d. Web. 12 Jan. 2016. .

Supporting Question 2 Featured Source B Nanjing Massacre

Excerpt

http://www.history.com/topics/nanjing-massacre

Source:

"Nanjing Massacre." History.com. A&E Television Networks, 2009. Web. 12 Jan. 2016..

Supporting Question 2 Featured Source C Bombing of Dresden

Excerpt

http://www.history.com/topics/world-war-ii/battle-..

Source:

"Bombing of Dresden." History.com. A&E Television Networks, 2009. Web. 12 Jan. 2016..

Supporting Question 2 Featured Source D Tokyo vs. Hiroshima

Excerpt

http://blog.nuclearsecrecy.com/2014/09/22/tokyo-hi..

Source:

Alex Wellerstein, "Tokyo vs. Hiroshima," Restricted Data: The Nuclear Secrecy Blog, September 22, 2014, accessed January 12, 2016, http://blog.nuclearsecrecy.com/2014/09/22/tokyo-hi...

Featured Source E Why Agonize Over Hiroshima, Not Dresden?

Excerpt

As we celebrate the 55th anniversary of the end of World War II, we might well look at America's fascination with guilt feelings about selected past sins. Why do some Americans feel guilty about our justified bombing of Hiroshima and Nagasaki, which immediately killed 120,000 Japanese (some estimates are significantly higher), and not about the unjustified bombing of Dresden, which killed 135,000 Germans?

City bombing is always brutal, but sometimes it is a tragic necessity. In a just war, and certainly the Allied cause was just, all military action should be designed to destroy the enemy's capacity and will to continue fighting.

First, the key facts about the bombing of Dresden on the night of February 13-14, 1945, 10 weeks before Germany's surrender, when everyone knew that Germany was beaten: Dresden... had no war industry and little military value. Its population of 630,000 had been doubled by German refugees, mainly peasants from Silesia [region in Central Europe] fleeing the Red Army [the military of the U.S.S.R.].

The concerted British and American attack dropped 650,000 incendiary bombs, causing a firestorm engulfing eight square miles and killing an estimated 135,000 men, women and children.

Why <u>visit</u> [commit] such carnage <u>on the cusp</u> [right before] of Germany's defeat? Some analysts say it was merely a continuation of the Allied strategy to bring Germany to its knees, but a postwar U.S. Strategic Bombing Survey concluded that such bombing did little to erode civilian morale or impede war production. Others say it was <u>vindictive</u> anger over Hitler's bombing of London and other British cities.

But Hitler's barbarity did not justify the fiery destruction of Dresden. Dresden was not a legitimate military target. British historian Paul Johnson has called the bombing "the greatest Anglo American moral disaster of the war against Germany." Yet few Americans have expressed shame or guilt....

Source:

"Why Agonize Over Hiroshima, Not Dresden?" LeFever, Ernest. Los Angeles Times, 30 Aug. 2000. Web. 28 Sept. 2015. .

Supporting Question 3	
Supporting Question	What reasons are given indicating that the use of atomic weapons on Japan was necessary?
Formative Performance Task	According to the documents in this set, what are the reasons the use of atomic weapons on Japan was necessary?
Featured Sources	 Source A: Was the Atomic Bombing of Japan Necessary? Source B: America's Atomic Atrocity Source C: Memorandum on the Use of S-1 Bomb
Additional Materials	 There are no additional materials needed.pdf (https://s3.amazonaws.com/idm-generator/u/6/2/7/e/46/627e9bad170ee8505339792591d87d42cb25327d.pdf)

This question will guide analysis of multiple documents to determine corroborating evidence regarding the necessity of using atomic weapons against Japan.

Formative Performance Task

Teachers will be able to assess students' ability to find corroborating evidence in multiple documents.

Featured Source A

Was the Atomic Bombing of Japan Necessary?

Excerpt

Few issues in American history - perhaps only slavery itself - are as charged as the dropping of the atomic bombs on Japan. Was it necessary?...

...the question will not die, nor should it: was dropping the atomic bombs on Hiroshima and Nagasaki a military necessity? Was the decision justified by the imperative of saving lives or were there other motives involved?

The question of military necessity can be quickly put to rest. "Japan was already defeated and dropping the bomb was completely unnecessary." Those are not the words of a latter-day revisionist historian or a leftist writer. They are certainly not the words of an America-hater. They are the words of Dwight D. Eisenhower, Supreme Commander of the Allied Forces in Europe and future president of the United States. Eisenhower knew, as did the entire senior U.S. officer corps, that by mid 1945 Japan was defenseless.

After the Japanese fleet was destroyed at Leyte Gulf in October 1944, the U.S. was able to carry out uncontested bombing of Japan's cities, including the hellish firebombings of Tokyo and Osaka. This is what Henry H. Arnold, Commanding General of the U.S. Army Air Forces, meant when he observed, "The Japanese position was hopeless even before the first atomic bomb fell because the Japanese had lost control of their own air." Also, without a navy, the resource-poor Japanese had lost the ability to import the food, oil, and industrial supplies needed to carry on a World War.

As a result... the Japanese had approached the Russians, seeking their help in brokering a peace to end the War. The U.S. had long before broken the Japanese codes and knew that these negotiations were under way, knew that the Japanese had for months been trying to find a way to surrender....

Civilian authorities, especially Truman himself, would later try to revise history by claiming that the bombs were dropped to save the lives of one million American soldiers. But there is simply no factual basis for this in any record of the time. On the contrary, the U.S. Strategic Bombing Survey reported, "Certainly prior to 31 December 1945, and in all probability prior to 1 November 1945, Japan would have surrendered even if the atomic bombs had not been dropped." The November 1 date is important because that was the date of the earliest possible planned U.S. invasion of the Japanese main islands.

In other words, the virtually unanimous and combined judgment of the most informed, senior, officers of the U.S. military is unequivocal: there was no pressing military necessity for dropping the atomic bombs on Japan.

But if dropping the bombs was not driven by military needs, why, then, were they used? The answer can be discerned in the U.S. attitude toward the Russians, the way the War ended in Europe, and the situation in Asia.

...to defeat Germany, the Russian army had marched to Berlin through eastern Europe. It occupied and controlled 150,000 square miles of territory in what is today Poland, Czechoslovakia, Hungary, Romania, Bulgaria, and Yugoslavia. At Yalta, in February 1945, Stalin demanded to keep this newly occupied territory....

...Stalin agreed at Yalta that once the War in Europe was over, he would transfer his forces from Europe to Asia and within 90 days would enter the War in the Pacific against Japan. This is where timing becomes critically important. The War in Europe ended on May 8, 1945. May 8 plus 90 days is August 8. If the U.S. wanted to prevent Russia from occupying territory in east Asia the way it had occupied territory in eastern Europe, it needed to end the war as quickly as possible....

Once the bomb was proven to work on July 15, 1945, events took on a furious urgency. There was simply no time to work through negotiations with the Japanese. Every day of delay meant more land given up to Russia... It would be a strategic catastrophe for the U.S. to have won the War against the fascists only to hand it to its other arch enemy, the communists. The U.S. needed to end the War not in months, or even weeks, but

in days.

So, on August 6, 1945, two days before the Russians were to declare war against Japan, the U.S. dropped the bomb on Hiroshima. There was no risk to U.S. forces then waiting for a Japanese response to the demand for surrender. The earliest planned invasion of the island was still three months away and the U.S. controlled the timing of all military engagements in the Pacific. But the Russian matter loomed and drove the decision on timing. So, only three days later, the U.S. dropped the second bomb on Nagasaki. The Japanese surrendered on August 14, 1945, eight days after the first bomb was dropped.

Major General Curtis LeMay commented on the bomb's use: "The War would have been over in two weeks without the Russians entering and without the atomic bomb. The atomic bomb had nothing to do with the end of the War at all." Except that it drastically speeded the War's end to deprive the Russians of territory in east Asia.

The story of military necessity, quickly and clumsily pasted together after the War's end, simply does not hold up against the overwhelming military realities of the time. On the other hand, the use of the bomb to contain Russian expansion and to make the Russians, in Truman's revealing phrase, "more manageable," comports [agrees with] completely with all known facts and especially with U.S. motivations and interests.

Which story should we accept, the one that doesn't hold together but that has been sanctified as national dogma? Or the one that does hold together but offends our self-concept? How we answer says everything about our maturity and our capacity for intellectual honesty.

...It may take another six or even sixty decades but eventually the truth of the bomb's use will be written not in mythology but in history. Hopefully, as a result, the world will be a safer place.

Robert Freeman writes about economics and education. He is the author of *The Best One-Hour History* series which includes *World War I, The Vietnam War, The Cold War* and other titles.

Source:

Freeman, Robert. "Was the Atomic Bombing of Japan Necessary?" Common Dreams, n.d. Web. 25 Sept. 2015...

Featured Source B America's Atomic Atrocity

Excerpt

Something like a moral earthquake has followed the dropping of atomic bombs on two Japanese cities. Its continued tremors throughout the world have diverted attention even from the military victory itself.... It is our belief that the use made of the atomic bomb has placed our nation in an indefensible moral position...

We do not propose to debate the issue of military necessity, though the facts are clearly on one side of this issue. The atomic bomb was used at a time when Japan's navy was sunk, her air force virtually destroyed, her homeland surrounded, her supplies cut off, and our forces poised for the final stroke. Recognition of her imminent defeat could be read between the lines of every Japanese communiqué.

Neither do we intend to challenge Mr. Churchill's highly speculative assertion that the use of the bomb saved the lives of more than one million American and 250,000 British soldiers. We believe, however, that these lives could have been saved had our government followed a different course, more honorable and more humane. Our leaders seem not to have weighed the moral considerations involved. No sooner was the bomb ready than it was rushed to the front and dropped on two helpless cities, destroying more lives than the United States has lost in the entire war.

Perhaps it was inevitable that the bomb would ultimately be employed to bring Japan to the point of surrender.... But there was no military advantage in hurling the bomb upon Japan without warning. The least we might have done was to announce to our foe that we possessed the atomic bomb; that its destructive power was beyond anything known in warfare; and that its terrible effectiveness had been experimentally demonstrated in this country. We could thus have warned Japan of what was in store for her unless she surrendered immediately. If she doubted the good faith of our representations, it would have been a simple matter to select a demonstration target in the enemy's own country at a place where the loss of human life would be at a minimum.

If, despite such warning, Japan had still held out, we would have been in a far less questionable position had we then dropped the bombs on Hiroshima and Nagasaki. At least our record of deliberation and ample warning would have been clear. Instead, with brutal disregard of any principle of humanity we "demonstrated" the bomb on two great cities, utterly extinguishing them. This course has placed the United States in a bad light throughout the world. What the use of poison gas did to the reputation of Germany in World War I, the use of the atomic bomb has done for the reputation of the United States in World War II. Our future security is menaced by our own act, and our influence for justice and humanity in international affairs has been sadly crippled....

Source:

"America's Atomic Atrocity" P.258-9. Christian Century Reader. August 29,1945. Web. 23 Sept. 2015.

Featured Source C

Memorandum on the Use of S-1 Bomb

Excerpt

The following is a memo sent by Under Secretary of the Navy, Ralph Bard, to Secretary of War Henry Stimson.

NOTES:

- · "S-1 bomb" means atomic bomb.
- The "three-power conference" refers to the Potsdam Conference between the leaders of the Great Britain, Russia, and the U.S., scheduled to begin on 7/16/45.
- · "Russia's position" refers to the likelihood of Russia soon declaring war on Japan.
- · "Assurances... with regard to the Emperor" referred to telling Japan that they could keep their Emperor, whom they believed to be a god.

Ever since I have been in touch with this program I have had a feeling that before the bomb is actually used against Japan that Japan should have some preliminary warning for say two or three days in advance of use. The position of the United States as a great humanitarian nation and the fair play attitude of our people generally is responsible in the main for this feeling.

During recent weeks I have also had the feeling very definitely that the Japanese government may be searching for some opportunity which they could use as a medium of surrender. Following the three-power conference emissaries from this country could contact representatives from Japan somewhere on the China Coast and make representations with regard to Russia's position and at the same time give them some information regarding the proposed use of atomic power, together with whatever assurances the President might care to make with regard to the Emperor of Japan and the treatment of the Japanese nation following unconditional surrender. It seems quite possible to me that this presents the opportunity which the Japanese are looking for.

I don't see that we have anything in particular to lose in following such a program. The stakes are so tremendous that it is my opinion very real consideration should be given to some plan of this kind. I do not believe under present circumstances existing that there is anyone in this country whose evaluation of the chances of the success of such a program is worth a great deal. The only way to find out is to try it out.

RALPH BARD

27 June 1945

Source:

"RALPH BARD:." Ralph Bard's Alternative to A-bombing Japan. N.p., n.d. Web. 23 Sept. 2015.

Supporting Question 4	
Supporting Question	What are the reasons the use of atomic weapons on Japan was unjustified?
Formative Performance Task	Teachers will be able to assess students' ability to find corroborating evidence in multiple documents.
Featured Sources	Source A: All documents in inquiry set.

According to the documents in this set, what are the reasons the use of atomic weapons on Japan was unjustified?

Formative Performance Task

Present an argument related to the question, "Was the dropping of atomic weapons on Japan an appropriate use of force?" Be sure to include specific claims and relevant evidence from the sources in this inquiry task's document sets as well as any other source you find and deem relevant to your argument.

Supporting Question 4 Featured Source A All documents in inquiry set.

Excerpt

All documents addressed in the previous supporting questions plus anything new discovered through research.

Source:

Summative Performance Task	
Compelling Question	Was the Dropping of Atomic Weapons on Japan an Appropriate Use of Force?
Argument	Present an argument related to the question, "Was the dropping of atomic weapons on Japan an appropriate use of force?" Be sure to include specific claims and relevant evidence from the sources in this inquiry task's document sets as well as any other source you find and deed relevant to your argument.
Extension	Engage in a class debate on this topic using evidence to support claims about the appropriateness of using atomic weapons on Japan at the end of World War II.
Additional Materials	 Social Studies Inquiry-Based Performance Task Rubric.pdf (https://s3.amazonaws.com/idm-generator/u/4/6/a/e/46/46ae9f0b4b0f752d9535c2c2310d69f715f1c44d.pdf)

Argument

In crafting their arguments related to this question, students should see that there are varied opinions on the matter and that the question is not settled. Since the document set has pieces that can be used to support either side of this debate, there should be opportunities to address and refute counterclaims.

Extension

This debate will serve as a review of the content as well as the application of the skill of making evidence based arguments.

Extend the debate to appropriateness of the use of force in Iraq in 2003.

Taking Informed Action	
Understand	Students should understand that using force against another nation, especially when civilians are impacted, is not something to take lightly. Whether or not to use of force should be meticulously analyzed and debated since the ramifications may be tremendous.
Assess	Students will determine their own guidelines for when it is appropriate to use force against other nations.
Action	Students will share their individual guidelines for the use of force and work to come to class consensus on guidelines all can support. The consensus guidelines will be put in a document for all students to sign and then send to their Congressperson.

 $Communication\ with\ elected\ representatives\ is\ one\ way\ to\ have\ an\ impact\ on\ policy.$

Appendices

 $\bullet \underline{ Social Studies Inquiry-Based Performance Task Rubric.pdf } (https://s3.amazonaws.com/idm-generator/u/4/6/a/e/46/ae9f0b4b0f752d9535c2c2310d69f715f1c44d.pdf)$

