



# The use of the atomic bomb: Hiroshima and Nagasaki

Lesson Map: <a href="http://esriaustralia.com.au/education/SpatialActivity77">http://esriaustralia.com.au/education/SpatialActivity77</a>

## **Engage**

Historical context: War ends in Europe but continues in the Pacific

- → Click on the URL above to open the Story Map (with built-in interactive maps). A Story Map will open, displaying the title page. Scroll down to get started.
- → Read through the first section titled *Historical Context*. Take notes if required. Stop to discuss as necessary.
- Recall what you may have learnt about Japanese values and culture (Year 8 History). What important cultural beliefs and values may have influenced Japan's decision to reject the Allied terms of unconditional surrender despite the threat of heavier air attacks? [Japanese society recognised the Japanese Emperor as not just their political leader but also a god. Integral values that permeated Japanese culture also included honour until death and courage. These two factors appear to be completely at odds to the idea of an unconditional surrender as the Japanese would be stripped of their honour and their Emperor would be stripped of his power and authority.]

# **Explore**

What were the effects of the atomic bomb on Hiroshima, Japan?

- Scroll down to the next section titled *Hiroshima*. Read through the information and take notes if required. Stop to discuss as necessary.
- → Watch the embedded YouTube video titled *Hiroshima: 75th anniversary of the atomic bomb* (1:30min). It displays some primary footage of the bomb's detonation and the aftermath at Hiroshima.
- → Scroll down and view the map titled *Radius damage of Little Boy atomic bomb at Hiroshima*. To view the legend, click on the icon in the bottom-left corner to see what each colour represents.

Download student worksheet here.

Time
70 minutes

## Activity

Investigate the use of the atomic bomb in WWII.

## Learning Outcome

Students will be able to:

- Identify factors that led to the decision to use atomic bombs against Japan
- Examine the effects of the atomic bombs on Nagasaki and Hiroshima
- Examine historical argument and debate regarding whether the use of atomic bombs against Japan was justified
- Examine and analyse sources

#### **ACARA Curriculum Link**

Year 10 History: World War II (1939-45)

ACDSEH107 | ACHHS182 | ACHHS183 | ACHHS187 | ACHHS188 | ACHHS189 | ACHHS190 | ACHHS191

### Teacher Feedback:

To share your feedback on this, or any Spatial Activity, please contact education@esriaustralia.com.au





Below the map, a more detailed explanation of the kind of damage that the atomic bomb did at different radiuses is discussed and elaborated on.



? Summarise the type of damage, death and injury that took place at the varying air blast radiuses. [In the area subject to heavy air blasts, buildings were either completely demolished or severely damaged and a fatality rate of 100% occurred. In the moderate air blast radius, residential buildings were still destroyed however, larger structures may have survived. A high fatality rate still occurred however, it was possible for survivors in this blast radius. In the light air blast radius, the air blast would not cause structural damage to buildings but would still break glass windows, which caused many secondary injuries as many people were drawn to windows at the time of the blast.]

# **Explain**

What were the effects of the atomic bomb on Nagasaki, Japan?

- → Scroll down to the next section titled *Nagasaki*. Read through the information and take notes if required. Stop to discuss as necessary.
- ? Despite the Fatman bomb being larger than the Little Boy bomb, its effects were contained to a degree by 'irregular terrain'. How may have the terrain contained the effects of the Fatman atomic bomb? [Hilly or mountainous terrain may have acted as natural barriers and inhibitors as air blasts, radiation fallout and fires would have met natural resistance, which may have slowed its travel speed and spread.]
- → Scroll down and view the map titled *Radius damage of Fatman atomic bomb at Nagasaki*. To view the legend, click on the icon in the bottom-left corner to see what each colour represents.
- → Scroll down to the next section titled *Understanding the magnitude of the 1945* atomic bombs. This section provides information on how to engage with the following map. By doing so, you will be able to visualise the damage radius of the Fatman atomic bomb if it were dropped on a major Australian city.
- Explore as many Australian major cities as you wish. You can also search for





New York and London.

- → Scroll down to the next section titled *Comparing the 1945 atomic bombs to modern nuclear weaponry.* Read the information and take notes if necessary. Stop to discuss as required.
- → Use the swipe map to compare the damage radius of the 1945 atomic bombs compared to a modern-day nuclear bomb. Zoom into one of Australia's major cities. As you swipe to the right, the damage radius of the *Fatman* atomic bomb will be evident. As you swipe back to the left, the damage radius of a modern-day nuclear weapon will be displayed.
- ? Choose one Australian major city to compare the two eras of atomic/nuclear bombs. Make an observation on the differences of the two damage radiuses. [Answers will vary.]
- → Scroll down to the next section titled *Radioactive fallout*. Read the information and take notes if necessary. Stop to discuss as required.
- → **Optional**: Visit <u>NukeMap</u> to 'detonate' bombs with radioactive fallout to witness possible effects on Australian cities or your local area.

#### **Extend**

#### Were the bombings on Japan justified?

- → Scroll down to the next section titled *Japan surrenders*. Read the information. Take notes if required. Stop to discuss as necessary.
- → Scroll down to the next section titled *Debate over the use of the atomic bomb in WWII*. Read the information. Take notes if required. Stop to discuss as necessary.
- → Scroll down to the next section titled *Primary and secondary sources regarding* the decision to use atomic bombs in WWII. Read the statement in orange. Keep this statement in mind as you work your way through the primary and secondary sources.
- As you work your way through the sources you may wish to keep track of what each source's position with regards to the statement is. You can do this in the table below:





Source	Origin (who	Reliability?	Perspective	Supporting evidence
	/ when /	Accuracy?	on use of	Triple 8
	position)	Usefulness?	atom bomb	
1	US President Harry S. Truman; Aug. 6 1945	Reliable as he is leader of America at this stage of WWII; is authorized to make comments and follow through on them	In favour of use/justified	Truman states that by using the atom bomb America is 'shortening the agony of war' and 'saving thousands and thousands of young American lives'
2	Encyclopaedia Britannica, 2020	Reliable as it is a reputable organisation & the purpose of the page is to educate and inform readers	Questionable decision as alternative existed	"a simple demonstration explosion on some uninhabited site in the Pacific – was considered but discarded"
3	Leo Szilard, nuclear physicist involved in Manhattan project, petition sent to President in 1945 prior to Japanese bombings	Reliable as Szilard was involved in the Manhattan project. Also, reliable as it represents 68 scientists involved in project as voicing the same concerns	Use of atomic bomb not justified unless Japan refuses surrender; and even then, still advises against use due to moral dilemma	"We feelthat such attacks on Japan could not be justified"  "Such a stepought not to be made at any time without seriously considering the moral responsibilities which are involved."
4	Philip Jenkins, Professor of History, 2016; published on ABC	Reliable as it comes from professor of History and is published on reputable news site.  Accuracy issues may exist as it is representative of a single opinion	Use of atomic bombs were justified	"using the atomic bombs saved lives – millions of them" "no atomic bombs, no Japanese surrender" Multiple other quotes
5	General Anami, War Minister of Japan. Made statements in August 1945, after bombs	Reliable as Anami was highest-ranking member of Japanese army and therefore represents the views of many military personnel in WWII	No perspective on use of bombs  His perspective shows that he did not believe in surrender despite bombs.	"Japan must fight to the end no matter how great the odds against us!"
6	Photo of Hiroshima aftermath 1945	Reliable as primary source. Useful in showing widespread destruction.	Image shows destruction and remnants of city.  No clear perspective.	Rubble and lack of civilians on street suggest that decision to use such deadly force was unwarranted. Alternatively, image could be used to suggest that it brought about a quick end to the war as it incapacitated Japan





? After you have read through the sources, respond to the statement below in paragraph form:

Task: The bombings of Hiroshima and Nagasaki cost hundreds of thousands of lives. To what extent can the decision to drop atomic bombs on Japan be justified as the right decision.

Use evidence from the source to support your response.

[Answers will vary depending on perspective adopted (justified; not justified; in part) but should include use of sources as supporting evidence. Model response for both sides of the argument are below for teacher reference.]

The decision to use atomic bombs against Japan was not justified as scientists warned of the devastating effects of atomic bombs, encouraging political and military leaders to pursue other avenues before resorting to dropping the bombs; these avenues were ultimately ignored. Even though Japan rejected the Allied terms of surrender that were issued from the Potsdam Conference in July 1945, they were not given sufficient warning of the magnitude of destruction available to the U.S. in the form of the atomic bombs. It is abundantly clear that a core group of physicists involved in the Manhattan project – a U.S. government-funded project to create an atomic bomb for military purposes – issued warnings to the President of the United States stating that "such attacks on Japan could not be justified" (Szilard, 1945). Even after the Japanese rejected terms of surrender, these scientists warned against the use of the bombs, "without seriously considering the moral responsibilities which are involved," and provided an alternative avenue for the U.S. military (Szilard, 1945). "A simple demonstration explosion on some uninhabited site in the Pacific," could be used in order to intimidate the Japanese (Encyclopaedia Britannica, 2020). It is clear that the U.S. Government could have carried out additional actions – like a demonstration – before resorting to using the atomic bomb.

The decision to use the atomic bombs against Japan were justified as the Japanese were unwilling to surrender and the use of bombs would bring about a quick end to the war, saving countless lives. Japanese cultural values held honour until death, loyalty and courage above all else and this significantly influenced their views on war and surrender. This is best exemplified in General Anami's refusal to surrender despite receiving reports of the destruction of the atomic bombs at Hiroshima and Nagasaki. He stated (1945), "[Japan] must fight to the end no matter how great the odds against us! Our men will simply refuse to lay down their arms." Despite this being one man's perspective, General Anami was War Minister of Japan, the highest ranking member of the Japanese army, and it is likely that many other military leaders and soldiers shared his views as they were ultimately based on cultural values of honour, loyalty and courage. This refusal of surrender was realized when Japan first rejected Allied terms





issued from the Potsdam conference in July 1945, meaning that the Allies were within their rights to look for alternative methods in bringing about a swift end to the war so as to minimize loss of life. Philip Jenkins (2016), Professor of History, argues that the decision to use the atomic bombs was justified as they, "saved lives – millions of them." He goes on to argue that the use of atomic bombs ended the war quickly, saving lives that would be lost for both sides in a ground invasion, saving lives that would be lost under Japanese occupation in China and Indonesia, and saving the lives of Allied POWs in Japanese hands (Jenkins, 2016). Jenkins (2016) even goes so far as to corroborate General Anami's aforementioned attitude: "...No atomic bombs, no Japanese surrender. We now have plenty of testimony on both sides to make that absolutely clear." It is clear that the decision to use atomic bombs against Japan was justified as Japan was willing to continue to fight and it brought a speedy end to the war, saving a significant amount of lives on both sides of the war.

# **Next Steps:**

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