

THE BOMBING OF HIROSHIMA AND NAGASAKI

Add your notes underneath each heading:

Causes and Consequences

CAUSES

★ Pearl Harbor attacks

<p><u>The Japanese Attacked Pearl Harbor</u>¹</p> <p><u>December 7, 1941</u></p> <p>President Franklin Roosevelt called December 7, 1941, "a date which will live in infamy." On that day, Japanese planes attacked the United States Naval Base at Pearl Harbor, Hawaii Territory. The bombing killed more than 2,300 Americans. It completely destroyed the American battleship <i>U.S.S. Arizona</i> and capsized the <i>U.S.S. Oklahoma</i>. The attack sank or beached a total of twelve ships and damaged nine others. 160 aircraft were destroyed and 150 others damaged. The attack took the country by surprise, especially the ill-prepared Pearl Harbor base.</p>	<p><u>President Truman's statement</u></p> <p>notifying the American public of the dropping of the atomic bomb on Hiroshima on August 6, 1945 included the following words: "The Japanese began the war from the air at Pearl Harbor. They have been repaid many fold."</p>	<p>Explain the Links to the event - why is this considered a Cause or Consequence?</p> <p>Truman came out twice in public speeches saying this is in relation to pearl harbour when talking about the two attacks.</p> <p>"As Commander in Chief of the Army and Navy, I have directed that all measures be taken for our defense. But always will our whole nation remember the character of the onslaught against us. No matter how long it may take us to overcome this premeditated invasion, the American people in their righteous might will win through to absolute victory. I ask that the Congress declare that since the unprovoked and dastardly attack by Japan on Sunday, December 7th, 1941, a state of war has existed between the United States and the Japanese empire."²</p>
<p>¹<i>President Truman, speaking on behalf the American people, displays that the U.S took this as a personal attack to their nation and</i></p>	<p>However, the pearl harbour attack may not be the most influential causation due to the fact that the bombing of Hiroshima was a result</p>	

¹ http://www.americaslibrary.gov/jb/wwii/jb_wwii_pearlhar_1.html

² <http://www.americanrhetoric.com/speeches/fdrpearlharbor.htm>

<p><i>will from that point on be in a war with the Japanese for what they did to Pearl Harbour.</i></p> <p>The bombing of Pearl Harbor awoke a sleeping giant, and that it did. The United States was to remain neutral during the second war in Europe and the bombing made declaring war a popular reaction.</p> <p>The attack on Pearl Harbour brought America into the war as the United States would never have let a surprise attack go without punishment. Because the Japanese forces caused the US to involve themselves in WWII, the pearl harbour attack is therefore a causation to any U.S bombings, especially one targeted at the nation that the American people grew to see as an enemy.</p>	<p>of not wanting to send 1 million american troops to japan for a land invasion.</p> <p>It's difficult to decipher whether or not the Pearl Harbour attacks were used as a justification for Hiroshima after the fact or whether they truly were a direct cause. The attack itself was incomparable to the years of extensive bombing Japan Suffered at the hands of America and took 140,000 lives while the bombing of Pearl Harbour took only 2,300. The fact that most Americans were able to accept Hiroshima as an appropriate act of retaliation shows that the American people did not value Japanese lives the same way they valued their own, possibly a result of the deep rooted racist beliefs that existed within American society at the time.</p>	
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★ Success of Manhattan Project

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
<p>History.com summary http://www.history.com/topics/world-war-ii/trinity-test The Manhattan Project was a secret military project created in 1942 to produce the first US nuclear weapon. the world's scientific community discovered that German physicists had learned the secrets of splitting a uranium atom, Fears that Nazi Germany would build and use a nuclear weapon during World War II triggered the start of the Manhattan Project, which was originally based in Manhattan, New York. he first contact with the government was made by G.B.</p>	<p>they discovered how to make atomic bomb and then used it to destroy hiroshima and nagasaki. If they discovered how to make the atomic bomb sooner they would have drop it on berlin, but they didn't because hitler killed himself.</p>	<p>It was very important because The Manhattan Project was a breakthrough in nuclear technology, without the project the bomb may not of been formed at the same time</p>

Pegram of Columbia University, who arranged a conference between Enrico Fermi and the Navy Department in March 1939. In the summer of 1939, Albert Einstein was persuaded by his fellow scientists to use his influence and present the military potential of an uncontrolled fission chain reaction to Pres. Franklin D. Roosevelt. Roosevelt saw neither the necessity nor the utility for such a project, but agreed to proceed slowly. In late 1941, the American effort to design and build an atomic bomb received its code name, the Manhattan Project, the project was put under the direction of the Office of Scientific Research and Development, headed by Vannevar Bush. In December 1942 Fermi finally succeeded in producing and controlling a fission chain reaction in a reactor pile at Chicago university. By the summer of 1945, amounts of plutonium-239 sufficient to produce a nuclear explosion had become available from the Hanford Works, and weapon development and design were sufficiently far advanced so that an actual field test of a nuclear explosive could be scheduled. The first atomic bomb was exploded at 5:30 AM on July 16, 1945, at a site on the Alamogordo air base 120 miles (193 km) south of Albuquerque, New Mexico. It was detonated on top of a steel tower surrounded by scientific equipment, with remote monitoring taking place in bunkers occupied by scientists and a few dignitaries 10,000

yards (9 km) away. The following month, two other atomic bombs produced by the project, the first using uranium-235 and the second using plutonium, were dropped on Hiroshima and Nagasaki, Japan.		
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★ Japanese Bushido code - refusal to surrender

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
<p>https://theworldwars.wikispaces.com/Bushido+on+WWII https://prezi.com/4wzzy8hqfpuw/kamikaze-and-bushido/</p> <p>“ The militaristic Japanese government presented war as a purifying experience, fit only for the Japanese. Bushido would supposedly would grant a spiritual shield that would protect the follower and allow them to fight to the end. All soldiers were expected to adhere to Bushido” “Nationalists and Japanese militarists that assumed power before the outbreak of world war two, twisted Bushido original meaning into a indoctrination tool that was used to instill a sense of intense nationalism and patriotism for the emperor and the island. With this new definition of Bushido, surrender was no option.”</p> <p>Kamikaze = Navy airplanes specialised in suicide missions Suggested that due to bushido being so embedded in Japanese culture that the government had no problem finding volunteers. Battle of Okinawa: 193 kamikaze attacks, 169 planes destroyed attacks sank 21 ships, damaged 66 biggest losses of US Navy in one battle 5,000 men lost Explanation of a kamikaze attack: Target: Allied warships (especially aircraft carriers) Pilot's goal: to sink the ship and die</p>	<p>Bushido prompted the dropping of the atomic bombs because it their refusal to surrender to the allied forces was strongly rooted in this unwritten code of conduct.</p> <p>The military used Bushido as a way of inciting their soldiers and as a method of propaganda</p> <p>Towards the end of war (even after the dropping of the bombs) there were still some soldiers who were determined to keep fighting and follow bushido, but (post atomic bombs) many of the japanese population began to see bushido was not what it had been made out to be.</p>	

http://www.bbc.co.uk/history/worldwars/wwtwo/japan_no_surrender_01.shtml

The Emperor Hirohito made his first ever broadcast to the Japanese people on 15 August 1945. He urged his people “to endure the unendurable and bear the unbearable”, he brought to an end to a state of war - both declared and undeclared - that had torn his country for 14 years.

- Duty to Emperor

<http://japangallagher.weebly.com/bushido.html>

- Includes Interesting video on the Psychology of Japanese people

“The act of submission to the enemy would be punished by the ultimate dishonor and betrayal of the emperor and the individuals morals.”

“The Japanese soldiers resented those who surrender or submitted to defeat in the face of the enemy.

“military regarded prisoners of war as sub-human and dealt with them as such. POWs were often tortured, neglected, or killed on the spot.”

“‘Hagakure’ written in the early 18th century - begins with the words, ‘Bushido is a way of dying’. Its basic thesis is that only a samurai prepared and willing to die at any moment can devote himself fully to his lord.”

...

“many soldiers unwilling to capitulate to the enemy due to years of military indoctrination and the bushido code, caught hundreds of miles from home, carried on the fight for Imperial Conquest on the island of Guadalcanal, Peleliu, and in numerous parts of the Philippines up till 1948.”

“A percentage of the Japanese population was able to see that the spiritual and mystical qualities of bushido were not going to carry them to victory, and realized they had been lied to.”

★ US desire to end war quickly & avoid land invasion of Japan

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
<p><i>Fog of War</i> clip on bombing of Japan: https://www.youtube.com/watch?v=J12n-ziZcTc</p>	<p>Due to the Japanese refusing to surrender against the Americans even after the first bomb drop in Hiroshima, they decided that the only solution was to drop another atomic bomb in Nagasaki, a city northwest coast from the island Kyushu. The war between these two countries was beginning to get too brutal and the only solution for the war to end was to damage Japan to the extent the Japanese prime minister declared surrender. The Americans had come to realise that this war was costing them too many American lives, as this is referred back to the battle in Okinawa (A Japanese island between Taiwan and Japan) where there were over 100,000 Japanese casualties and over 50,000 American casualties. As the Japanese refused to accept the Potsdam declaration, they dropped a bomb over Nagasaki, injuring and killing more Japanese citizens which resulted in the Japanese surrendering against the Americans.</p>	

CONSEQUENCES

From NZQA - Significance may be determined by:

- the impact and importance of the event on people over a period of time
- how deeply people's lives were affected over a period of time
- how many lives were affected
- the length of time people's lives were affected

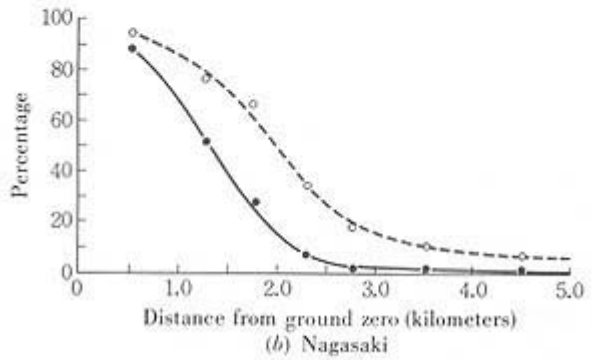
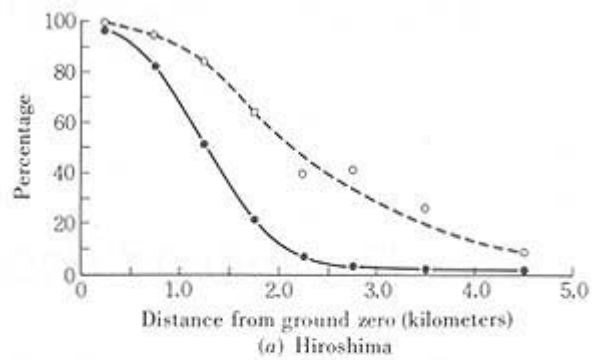
- the extent to which the event continues to affect society.

★ Japanese surrender, end of War.

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
<p>BBC Hiroshima documentary clips. Nagasaki Bombing: Includes Japanese discussions about surrender. http://www.history.com/this-day-in-history/japan-surrenders http://www.historynet.com/world-war-ii-second-atomic-bomb-tha-t-ended-the-war.htm</p> <p>When they surrendered: September 2nd, 1945.</p> <p>Why... On Monday, August 6, 1945, the first atomic bomb was dropped on Hiroshima Three days later the second bomb was dropped on Nagasaki</p> <p>The Japanese were not convinced from the first bomb that they would surrender however after the second the majority of Japanese new it was going to be hopeless to continue in the war, looking at the date they surrendered they still took awhile to think about it and there were still a certain few who did not want to surrender, but after going to the emperor for his opinion they made a conclusion with his opinion that they needed to surrender to the U.S.</p>	<p>Immediate Consequence</p> <p>1 - The Japanese ended up asking the emperor at the time whether they should surrender or not as it was quite divided between people who had a lot of pride and didn't want to give up and people who knew if they kept going it would end in total destruction.</p> <p>2 - Okinawa is another link to the Japanese surrendering and the complete end of the war. Japanese showed their pride at Okinawa, they lost many lives but kept fighting. The Americans also realised that they needed to do something bigger than the fighting they had been doing, for example at Okinawa, which had been the largest attack in the pacific prior to the atomic bombs, because of the Japanese pride. Therefore if they had done anything less than drop the bombs it would not have been likely that Japan would surrender.</p>	

★ Death and suffering of Japanese people.

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
<p><u>24 hours after: Hiroshima</u></p>	<p>Short and Long-term Consequence</p> <p>“Chaotic conditions made accurate accounts most difficult. Some victims were vaporized instantly, many survivors were horribly disfigured, and death from radiation was uncertain—it might not claim its victims for days, weeks, months, or even years.”</p> <p>“The initial death count in Hiroshima, set at 42,000–93,000, was based solely on the disposal of bodies, and was thus much too low. Later surveys covered body counts, missing persons, and neighborhood surveys during the first months after the bombing, yielding a more reliable estimate of 130,000 dead as of November 1945. A similar survey by officials in Nagasaki set its death toll at 60,000–70,000. (Its plutonium bomb was more powerful, but its destructive range was limited by surrounding hills and mountains).”</p> <p>The radius</p> <p>—Over 90% of persons within 500 meters (1,600 ft.) of ground zero in both cities died.</p> <p>—At 1.5 km (almost one mile), over 2/3 were casualties, and 1/3 died.</p> <p>—Of those at a distance of 2 km (1.2 mi.), half were casualties, 10% of whom died.</p> <p>—Casualties dropped to 10% at distances over 4 km (2.4 mi.).</p> <p>Most persons close to ground zero who received high radiation dosages died immediately or during the first day. One-third of all fatalities occurred by the 4th day; two-thirds by the 10th day; and 90% by the end of three weeks.</p> <p>This diagram illustrates the radius of destruction and compares Hiroshima and Nagasaki:</p>	



Acute stages ran overall from initial exposure to 4th month, with both primary and secondary thermal burns. Numerous A-bomb casualties (deaths) occurred almost simultaneously with explosion, but both injury and mortality rates fell with increased distanced.

—primary (flash burns)



Long term consequences:

Within the first few months after the bombing, it is estimated by the Radiation Effects Research Foundation (a cooperative Japan-U.S. organization) that between 90,000 and 166,000 people died in Hiroshima, while another 60,000 to 80,000 died in Nagasaki. These deaths include those who died due to the force and excruciating heat of the explosions as well as deaths caused by acute radiation exposure.

While these numbers represent imprecise estimates—due to the fact that it is unknown how many forced laborers and military personnel were present in the city and that in many cases entire families were killed, leaving no one to report the deaths—statistics regarding the long term effects have been even more difficult to determine.

Though exposure to radiation can cause acute, near-immediate effect by killing cells and directly damaging tissue, radiation can also have effects that happen on longer scale, such as cancer, by causing mutations in the DNA of living cells. Mutations can occur spontaneously, but a mutagen like radiation increases the likelihood of a mutation taking place. In theory, ionizing radiation can deposit molecular-bond-breaking energy, which can damage DNA, thus altering genes. In response, a cell will either repair the gene, die, or retain the mutation. In order for a mutation to cause cancer, it is believed that a series of mutations must accumulate in a given cell and its progeny. For this reason, it may be many years after exposure before an increase in the incident rate of cancer due to radiation becomes evident. Among the long-term effects suffered by atomic bomb survivors, the most deadly was leukemia. An increase in leukemia appeared about two years after the attacks and peaked around four to six years later. Children represent the population that was affected most severely.

Attributable risk—the percent difference in the incidence rate of a condition between an exposed population and a comparable unexposed one — reveals how great of an effect radiation had on leukemia incidence. The Radiation Effects Research Foundation estimates the attributable risk of leukemia to be 46% for bomb victims.

For all other cancers, incidence increase did not appear until around ten years after the attacks. The increase was first noted in 1956 and soon after tumor registries were started in both Hiroshima and Nagasaki to collect data on the excess cancer risks caused by the radiation exposure. The most thorough study regarding the incidence of solid cancer (meaning cancer that is not

leukemia) was conducted by a team led by Dale L. Preston of Hirosoft International Corporation and published in 2003. The study estimated the attributable rate of radiation exposure to solid cancer to be significantly lower than that for leukemia—10.7%.

According to the RERF, the data corroborates the general rule that even if someone is exposed to a barely survivable whole-body radiation dose, the solid cancer risk will not be more than five times greater than the risk of an unexposed individual.

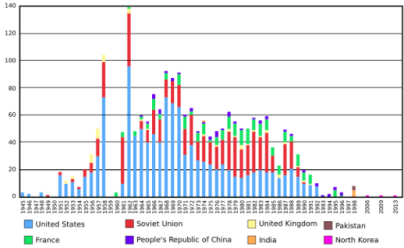
Nearly seventy years after the bombings occurred, most of the generation that was alive during the attack has passed away. Now much more attention has turned to the children born to the survivors. Regarding individuals who had been exposed to radiation before birth (*in utero*), studies, such as **one led by E. Nakashima in 1994**, have shown that exposure led to increases in small head size and mental disability, as well as impairment in physical growth. Persons exposed *in utero* were also found to have a lower increase in cancer rate than survivors who were children at the time of the attack.

One of the most immediate concerns after the attacks regarding the future of both Hiroshima and Nagasaki was what health effects the radiation would have on the children of survivors conceived after the bombings. **So far**, no radiation-related excess of disease has been seen in the children of survivors, though more time is needed to be able to know for certain. In general, though, the healthfulness of the new generations in Hiroshima and Nagasaki provide confidence that, like the oleander flower, the cities will continue to rise from their past destruction.

Perhaps most reassuring of this is the view of the cityscapes themselves. Among some there is the unfounded fear that Hiroshima and Nagasaki are still radioactive; in reality, this is not true. Following a nuclear explosion, there are two forms of residual radioactivity. The first is the fallout of the nuclear material and fission products. Most of this was dispersed in the atmosphere or blown away by the wind. Though some did fall onto the city as black rain, the level of radioactivity today is **so low it can be barely distinguished** from the trace amounts presents throughout the world as a result of atmospheric tests in the 1950s and 1960s. The other form of radiation is neutron activation. Neutrons can cause non-radioactive materials to become radioactive when caught by atomic nuclei. However, since the bombs were detonated so far above the ground, there was very little contamination—especially in contrast to nuclear test sites such as those in Nevada. In fact, nearly all the induced radioactivity decayed within a few days of the explosions. Today, the liveliness of the cities of Hiroshima and Nagasaki serves as a reminder not only of the human ability to regenerate, but also of the extent to which fear and misinformation can lead to incorrect expectations. After the bombings of Hiroshima and Nagasaki, many

	<p>thought that any city targeted by an atomic weapon would become a nuclear wasteland. While the immediate aftermath of the atomic bombings was horrendous and nightmarish, with innumerable casualties, the populations of Hiroshima and Nagasaki did not allow their cities to become the sort of wasteland that some thought was inevitable. This experience of can serve as lesson in the present when much of the public and even some governments have reacted radically to the accident in Fukushima--in the midst of tragedy, there remains hope for the future.</p>	
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★ Beginning of Nuclear Arms Race.

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
<p>http://www.johndclare.net/cold_war5.htm</p> <p>Refer to your Handout for more graphs and stats</p> <p>Worldwide nuclear testing, 1945 - 2013</p>  <p>Legend: United States (blue), Soviet Union (red), United Kingdom (yellow), Pakistan (purple), France (green), People's Republic of China (orange), India (brown), North Korea (pink)</p>	<p>Short and Long-term Consequence</p> <ul style="list-style-type: none"> - The nuclear arms race can be considered a consequence due to the beginning of the race beginning after the first initial atomic bomb droppings of Hiroshima and Nagasaki. After world war two ended new hostilities arose between the US and USSR. - There is the argument to be considered that Stalin was angry due to the US being very vague about their development of the atomic bomb and how they were going to use it. In his biography 'A Year of Decisions' Harry S Truman states "On July 24 I casually mentioned to Stalin that we had a new weapon of unusual destructive force. The Russian Premier showed no special interest. All he said was hetwbr was glad to hear it and hoped we would make "good use of it against the Japanese." - There are several other reasons that historians have suggested why Stalin may have felt alienated by the atomic bombing.³ Sources do suggest that Stalin knew about the development of nuclear weapons however the dropping of the a nuclear bombs on Japan confirmed this for him and he 	<p>Effect on people -</p> <p>During the time of the nuclear arms race there was the widely spread fear that humanity would not survive another nuclear attack, a generation (1945-1990) grew up in fear that one press of a button could essentially destroy all of humanity. "An entire generation grew up under the shadow of imminent catastrophe."</p>

³http://www.johndclare.net/cold_war5.htm

	<p>gave orders for Soviet scientist to begin developing their own.</p> <p>Extra info - A year after the bombs were dropped in 1945 Joseph Stalin gave his famous speech 'Bolshoi' where he argued that America was using their atomic advantage for imperialism. Showing the ingrained cold war attitudes from the bombing.</p> <p>Evidence</p> <ul style="list-style-type: none"> - It is a widely held belief that the atomic bombing of the Japanese cities Hiroshima and Nagasaki lead to the nuclear arms race in the Cold War between the Soviet Union and the United States. - Tes - The nuclear arms race began in August 1945 and lasted until 1990 when the Europe Treaty was signed. - In 1949 August 29th the Soviet Union tested their first successful atomic bomb. - In 1952 United States developed the hydrogen bomb, (even more powerful than the atomic bomb) one year later the soviet union developed their own version. <p>During the time of the nuclear arms race there was the widely spread fear that humanity would not survive another nuclear attack, a generation (1945-1990) grew up in fear that one press of a button could essentially destroy all of humanity. "An entire generation grew up under the shadow of imminent catastrophe."</p> <p>Mutually Assured Destruction (both Countries could destroy each other) - neither side was willing to use their weapons.</p>	
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★ Start of Age of Nuclear Power.

Evidence	Links to Event: Dropping the A Bombs	Relative Importance
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	Long-term Consequence	
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