

History, The Cold War: Superpower relations between  
1941-1991

Lesson 3 of 30

## Worksheet

**Why did the atomic bomb damage  
US-Soviet relations?**



# Dropping the atomic bomb on Japan

The world's first **atomic bomb** used in war was dropped by an American bomber on the Japanese city of Hiroshima on August 6, 1945, ending WW2. The bomb destroyed 90 percent of the city and immediately killed 80,000 people; tens of thousands more would later die of **radiation** exposure. Three days later, a second bomb was dropped on Nagasaki, killing an estimated 40,000 people. Japan's Emperor Hirohito announced his country's unconditional **surrender** in WW2 in a radio address on August 15, giving the reason as the destruction caused by **"a new and most cruel bomb."** The bombs were dropped just after the Potsdam conference ended. Truman made the decision to **drop the atomic bomb for political reasons, to intimidate the Soviet Union**, and military ones, to defeat Japan and end the war.



# Nuclear deterrence

The development of nuclear weapons led to a fundamental change in thinking about war. Weapons were **not designed to win a war anymore**, they were now **developed to try and stop each side from going to war** by proving how powerful each side was.

The idea that nuclear weapons were a deterrent to war suggested that the very fact that a country possessed nuclear weapons would prevent another country from threatening it, because they wouldn't want to provoke a nuclear attack. In order to maintain the fear of nuclear attack, the superpowers had to **continue to build up their stockpiles of ever more powerful nuclear weapons** so that they would have the power to **massively retaliate** against any potential attack by their enemies.



# The arms race

An arms race involves two or more countries **increasing the size and quality of their military resources** in order to achieve military and political superiority. This was particularly important in the Cold War when the United States and the Soviet Union were also competing over which ideology was better; Communism or Capitalism. The **military power of each country was a sign of the success of the ideology** they followed. The arms race in the Cold War was not just about **conventional weapons**, but also involved nuclear weapons. The Americans had developed a nuclear weapon by 1945, working with the British since 1941. They felt secure in their position as the only nuclear power because they assumed it would take between eight and 15 years for the USSR to develop their own atomic bomb given the wartime destruction the they had experienced.



The US kept the details of their **atomic bomb development top secret**. Truman told Stalin that he had a new extremely destructive weapon that would prove useful in the war at the Potsdam conference, but did not give him details. **Stalin felt threatened by the US's atomic bomb** and feared it would affect the Soviet Union's place in the post-war world. He was determined that the US should not have this advantage. Thanks to Stalin's spies inside the US nuclear programme, **Soviet scientists successfully tested an atomic bomb in 1949, ending America's position as the only nuclear power in the world**. This started the nuclear arms race as America reacted by developing an even more powerful nuclear bomb. The nuclear arms race defined the rest of the Cold War as the two superpowers competed to see who would have the most weapons of mass destruction and who could use them most effectively.



# Development of the arms race

The arms race began after the destruction of the cities of Hiroshima and Nagasaki by American atomic weapons in August 1945 and lasted until the signing of the Conventional Forces in Europe treaty of November 1990.

In 1946, during the first meeting of the United Nations Atomic Energy Commission (UNAEC), the United States presented the **Baruch Plan**. This said that the Soviets should share information on their atomic energy program, including opening their facilities to international inspectors. In return, the United States would share their nuclear technology with them.



However, as the Grand Alliance began to break down at the wartime conferences, the US became concerned about the spread of Soviet power and influence over Eastern Europe and were worried that they wanted to spread Communism further round the world. The Soviet Union resented the United States' interference in world affairs and were also concerned by America's military build-up.

This meant that the **Soviets rejected the Baruch Plan** and therefore that, by 1949, there was **no chance that the US and Soviet Union would cooperate over nuclear technology**. It became another way to show the superiority of each ideology.



The USSR successfully tested their own atomic bomb on August 29 1949, producing 20-kiloton blast roughly equal to the American's firepower. This was far earlier than the US had expected. This meant that America was no longer the only country with nuclear weapons meaning they had lost their military advantage. **Losing their atomic advantage shocked the US who felt threatened as they feared their supply of nuclear weapons was insufficient to protect them against Soviet attack.** As a result, the United States tested the highly destructive **hydrogen** "superbomb" in 1952 and the Soviet Union did the same in 1953. These generated explosions of ten megatons (equivalent to 10,000,000 tons of TNT, whereas the bomb used on Hiroshima yielded the equivalent of 12,500 tons). In 1957, both countries tested their first **intercontinental ballistic missiles** (ICBMs). This increased the intensity of the arms race as both sides now had the ability to launch nuclear weapons that could reach targets 4,500km away.





# Why did the arms race help to start the Cold War?

Truman had deliberately **timed the testing of the bomb to the first day of the Potsdam conference** to give him an advantage over Stalin in negotiations. There is also evidence to suggest that Truman dropped the bomb on Japan as a warning to the Soviet Union that America wanted to dominate how the world would look after the war. The **dropping of the atomic bomb** on Hiroshima and Nagasaki not only ended WW2, it **started the Cold War**. Although the US had told the USSR they had created a new bomb, they didn't tell them they planned to drop one on Japan. Japan surrendered very quickly after the atomic bombs were dropped which showed how powerful the new weapons were; they could, literally, end a war. The knowledge of the destructive power of nuclear weapons meant that **countries were reluctant to go to war in case nuclear weapons were used**. Nuclear weapons helped to keep the Cold War 'cold' for nearly 50 years.



**Stalin** was determined to show he would **not be intimidated** and to develop atomic weapons as quickly as possible. He also became keener than ever to create a **'buffer zone'** in Eastern Europe. During WW2, 20 million Russians died, so Stalin wanted friendly states around the USSR to **make sure that they could never be invaded** again. He also wanted to protect the USSR against nuclear attack. Truman wanted to stop the spread of Communism which created tension with Stalin who was trying to expand and secure his influence and control in Eastern Europe.

**America's nuclear military advantage** added to the suspicion and mistrust that the USSR felt for the USA, **damaging US-Soviet relations.**



# Glossary

**Radiation** - energy that moves from one place to another. Nuclear radiation damages the cells that make up the human body

**Surrender** - stop resisting an enemy or opponent

**Massively retaliate** - nuclear strategy in which a state commits itself to respond with much greater force in the event of an attack

**Conventional weapons** - normal or ordinary military equipment (not nuclear)

**Buffer zone** - an area of land to separate unfriendly countries

**Atomic bomb, hydrogen bomb, ICBM** - different types of nuclear weapons developed during the arms race



# Major events of the arms race

**1945** USA drops atomic bombs on the Japanese cities of Hiroshima and Nagasaki

**1949** The USSR's first successful atomic bomb test ends American nuclear monopoly

**1950** The UK carries out nuclear tests in Western Australia

**1952** The USA successfully tests the first Hydrogen bomb, 2500 times more powerful than the atomic bomb

**1953** The USSR tests its own Hydrogen bomb.

**1955** The USA publishes its Doctrine of Massive Retaliation stating that any attack on the USA or its allies would be met with incredible destructive force



**1957** In order to launch the satellite Sputnik I, the USSR had developed a rocket. The same rocket was capable of carrying an atomic warhead for thousands of miles. This meant the USSR had created the first Intercontinental Ballistic Missile (ICBM).

**1958** The USA tests its own ICBMs

**1959** The USA deploys Polaris submarines capable of launching nuclear missiles close to the shore of the USSR

**1961** The USSR detonates the Tsar Bomba, a nuclear bomb which produced the largest ever man-made explosion

**1962** The Cuban Missile Crisis

**1968** The USSR develops an Anti-Ballistic Missile system to shoot down in-bound US missiles

**1968** The USA develops MIRV technology - allowing missile warheads to hit multiple targets from one missile



# Comprehension Questions

1. Why did nuclear weapons make war less likely?
2. Why did the atomic bomb help start the Cold War?
3. Why did the 'arms race' develop?
4. Where, and why, did the USSR want a 'buffer zone'?
5. **Challenge question:** why did the atomic bomb damage US-Soviet relations?

**Once you have completed your answers, resume the lesson to find out how you got on and hear some more.**

