

History: The Cold War
Lesson 13 of 30

Worksheet:

How did the arms race increase tensions?



Context

In July 1945, the USA successfully tested the atomic bomb. Then, on 6th and 9th August 1945, the USA dropped atom bombs on Hiroshima and Nagasaki, which killed 120,000 Japanese civilians. In 1949, Soviet scientists tested their own atom bomb successfully. The arms race had begun.

Over the course of the 1950s, the arms race **escalated** and **caused the Cold War to intensify**. The USA and the USSR began to urgently develop new and more powerful weapons. They wanted to avoid a **missile gap** with their enemy. By 1957, both the USA and the USSR had tested weapons that had the power to hit a target more than 4500km away. How did the superpowers reach this point and with what consequences?



How did the arms race **escalate** in the 1950s?

After the **USSR tested its first atomic bomb in 1949**, the competition between the two superpowers began to increase. **In 1952, the USA developed its first hydrogen bomb**, known as the H-bomb. This was an extremely powerful weapon with the potential to cause incredible destruction; **it was 1000 times more powerful than the atomic bomb**. It was clear that the Americans wanted to keep their advantage over the USSR.

However, the USSR was very quick to respond to the USA's testing of the H-bomb. Just one year later, **in 1953, the USSR also had a hydrogen bomb**, having tested it only a few months after the first American test.



How did the arms race **escalate** in the 1950s?

It was very clear to both superpowers that each would try to **rapidly match** what the other had achieved. Consequently, the USA next turned its attention to **increasing the power of its weapons**. For example, on 1 March 1954, the USA tested its most powerful hydrogen bomb to date: the explosive power of this bomb was equal to approximately 15 million tons of **TNT**. Bombs such as these were **capable of destroying entire cities**. Equally, while the USSR had yet to match the USA's nuclear capacity, the weapons which it had already developed could have easily destroyed the USA. It was clear that the arms race had **escalated** to terrifying heights.



How did the arms race **escalate** in the 1950s?

In 1957, the USA developed Intercontinental **Ballistic Missiles** (ICBMs). These had the power to **fire a nuclear explosive at a target more than 4,500km away**. This meant that the USA could now target, attack and strike a location that was thousands of miles away, with incredible and terrifying accuracy. The USSR recognised the destructive potential of this weapon and so, in **August 1957**, just two months after the USA launched its first ICBM, **the USSR began testing its own ICBMs**. By 1961, the USA had developed 63 ICBMs and the USSR had developed over 50. Through this rapid process of arms production in response to the developments of the other, the superpowers had each built up an incredible military force. By 1957, both the USA and the USSR were **capable of destroying the world a number of times over**.



What were the consequences of the arms race?

The arms race undoubtedly led to both the USA and the USSR **increasing their power and their potential military capacity**. The Americans and the Soviets both feared that if they did not keep up with the other then they would be increasingly vulnerable to attack. Consequently, at least initially, the **arms race increased tensions between the superpowers** as they each struggled to outmanoeuvre or catch-up with the other. This led to an **intensification of the Cold War**. It became clear that, if direct confrontation between the USA and the USSR were to occur, highly destructive weapons could be fired from a great distance away and the world could be destroyed a number of times over.



What were the consequences of the arms race?

However, the extent to which the arms race escalated throughout the 1950s also led to a change in the way the USA and the USSR viewed the purpose of their nuclear weapons. Rather than accumulating weapons so that they could win wars, the USA and the USSR were now creating **nuclear weapons as a deterrent**, to try and prevent a war from breaking out. This was called **‘Mutually Assured Destruction’ (M.A.D)** and was the belief that having nuclear weapons would stop a rival from going to war, as war would risk the outbreak of nuclear war and complete **annihilation**. In this sense, the increased development of nuclear weapons which the arms race created ironically **discouraged the US and the USSR from declaring war on each other.**



What were the consequences of the arms race?

Finally, by the mid- 1950s, the **cost of the arms race was starting to affect both American and Soviet decision making.** Both countries had new leaders, in the form of **Dwight Eisenhower** for the **USA** and **Nikita Khrushchev** for the **USSR**. These leaders recognised the dangers posed by nuclear weapons and the significant cost of the arms race. Because of this, both countries began to see the **benefits of improving relations with each other**, so that they could free up money to invest in their own economies rather than in the development of more weaponry. This meant that, to a certain extent, the heights and expense that the arms race had reached by the mid-1950s actually contributed to a short period of **peaceful coexistence** between the USA and the USSR.



What were the consequences of the arms race?

However, it is important to recognise that this was very **short-lived** and the **arms race never fully halted**. By 1957, both the USA and the USSR were once again competing to develop even more destructive weapons, such as ICBMs. **President Eisenhower** also increased the USA's spending on missiles by 20 per cent between 1957-59. Therefore, while tensions between the superpowers did **fluctuate** during the 1950s, it is clear that the **arms race did more to increase rather than decrease tensions**. It did this by generating ruthless competition between the superpowers which, in turn, led to more and increasingly powerful nuclear weapons being produced on each side. Ultimately, this **caused the Cold War to become more intense**.



Glossary

Annihilation – the act of destroying completely

Ballistic missile – a weapon that is initially fired by something and that has a long, arcing flight path, but then falls by gravity to its target

Escalate – to increase in intensity, amount or size

Fluctuate – to rise and fall



Glossary

Missile gap – a fear, often held by the USA in the late 1950s and 1960s, that they did not have the same amount or standard of weapons as the USSR

Peaceful co-existence – a theory created by the USSR in the Cold War to describe a policy of peace between nations that have different ideologies or beliefs

TNT – a powerful, yellow explosive substance often used in dynamite



Comprehension Questions

1. What did the USA do in 1952 and how did the USSR respond?
2. Why did the USA's development of Intercontinental Ballistic Missiles (ICBMs) in 1957 make tensions increase?
3. Why did the arms race make war between the USA and the USSR less likely?
4. Why did the new leaders of the USA and the USSR want to try and improve relations by the mid-1950s?
5. Challenge question: Why did the arms race increase tensions between the USA and the USSR?

