Part 4 – The Arms Race and the Space Race

Use the following paragraph to answer questions 1-2

In 1949, the Soviet Union exploded its first atomic bombs. Soon both the United States and Soviet Union also developed far more destructive hydrogen bombs and the missiles to deliver them. Americans and Soviet leaders quickly realized that these weapons could hardly ever be used because of their immense destructiveness. Instead nuclear weapons served as deterrents, preventing the Superpowers from attacking one another. The Superpowers became locked in a new "Balance of Terror," which forced them to find other channels for competition. They soon became involved in a number of regional conflicts, some of which led to warfare on a limited scale.

Use the following information to answer questions 3-4.

Secretary of Defense Robert McNamara (under John F. Kennedy & Lyndon Baines Johnson) set out the following formula for the number of nuclear weapons needed by the US:

If a country (the US or USSR) had and deployed 200 nuclear weapons, within the 1st hour, they would’ve killed 75% of the population and destroyed 50% of industry of their enemy.

This would keep MAD (mutually assured destruction) certain and keep both sides from using nuclear wars.

By 1986, the United States had 1919 missile launchers with 11,740 nuclear warheads attached. The Soviet Union had 2504 launchers and 9,980 nuclear warheads.

Use the following information to answer questions 5-6.

**Sputnik** 1 was the first artificial Earth satellite. It was a 585 mm diameter shiny metal sphere, with four external radio antennae to broadcast radio pulses. The Soviet Union launched it into an elliptical low Earth orbit on 4 October 1957.

Despite President Eisenhower’s confidence in the U.S.’s education systems, the launch of Sputnik provoked reforms in schools nationwide. The National Defense Education Act was passed, as a result of Sputnik, in August of 1958, and was intended to promote knowledge in science, math, and foreign languages. This billion-dollar plan had a few main features. College students became eligible for up to $1000 per year, and colleges that made loans would receive government funding. Reforms were also made in grade schools and high schools around the country, where remodeling occurred to improve math, science, and language facilities. Teachers became better educated in these fields as a result of this plan as well.
Apollo 11 was the spaceflight that landed the first humans, Americans Neil Armstrong and Buzz Aldrin, on the Moon on July 20, 1969, at 20:18 UTC. Armstrong became the first to step onto the lunar surface 6 hours later on July 21 at 02:56 UTC. Broadcast on live TV to a world-wide audience, Armstrong stepped onto the lunar surface and described the event as "one small step for [a] man, one giant leap for mankind." Apollo 11 effectively ended the Space Race and fulfilled a national goal proposed in 1961 by the late U.S. President John F. Kennedy in a speech before the United States Congress, "before this decade is out, of landing a man on the Moon and returning him safely to the Earth."