

The Space Race

One of the most symbolic representations of the Cold War was the competition between the USSR and the USA as they raced each other into space. How did this “space race” get started? How did it end?

On October 4th, 1957, the Soviet Union became the first nation to launch an artificial satellite into orbit around the planet. This satellite, a large metal sphere about the size of a beach ball, was known as Sputnik 1. With the successful launch of Sputnik, the “space race” had begun.

America quickly responded. Within four months, the first US satellite, Explorer 1, achieved orbit around the Earth.



However, the US had always thought of itself as the leader in rocket development and space technology. Therefore, the fact that the Soviets had achieved this feat first greatly disturbed many Americans. In fact, many citizens panicked, viewing this as proof that the American education system was far behind that of the Soviets. School curriculum was carefully examined, placing a stronger emphasis on science and mathematics courses.

The following year, the National Aeronautics and Space Administration (NASA) was created to help the United States more effectively achieve its goals in space.

In April of 1961, Soviet cosmonaut Yuri Gagarin became the first man to orbit the planet. Once again, the United States had been beaten into space. One month later, Alan Shepherd became the first American in space, but, the US did not have a man orbit the planet until nearly a year later, when John Glenn accomplished the feat.

On May 25, 1961, President John F. Kennedy made a bold announcement that the United States would make it a goal to land a man on the moon before the end of the decade. Needless to say, since the US had stated this as their goal, the USSR also began making plans to put a man on the moon.

Throughout the decade of the 1960s, both the Americans and the Soviets experienced many successes and failures in their efforts to reach the moon. The most tragic event occurred in 1967. In January of that year, three American astronauts were killed in a fire while onboard the Apollo 1 spacecraft. In April of 1967, the Soviets also lost its first cosmonaut who died while attempting re-entry into the Earth's atmosphere.

Finally, in 1969, the Apollo 11 mission saw the US win the race to the moon. The craft was commanded by Neil Armstrong, along with crewmates Edwin “Buzz” Aldrin and Michael Collins. On July 20th, 1969, Neil Armstrong became the first human to set foot on the surface of the moon. As he did so, he spoke his famous line, “That’s one small step for man; one giant leap for mankind.”

With the astronauts’ arrival on the moon, the space race effectively came to an end. Both the Soviet Union and the United States would continue their space programs, but many of the early goals had already been achieved.

Multiple Choice: *Select the choice that completes the statement or answers the question.*

1. _____ The first Soviet satellite was known as?
 - a. Eagle I
 - b. Explorer I
 - c. Sputnik I
 - d. Cosmonaut I

2. _____ What was the American reaction to the launch of the Soviet satellite?
 - a. Most Americans did not care, they were too busy with their lives to notice
 - b. Many Americans panicked, fearing that America's school curriculum was not difficult enough
 - c. The US military immediately shot down the Soviet satellite
 - d. Americans reacted with contempt; they knew the Soviets could not compete with the US in the space race

3. _____ The first human to orbit the planet was?
 - a. Yuri Gagarin
 - b. Neil Armstrong
 - c. Chuck Yeager
 - d. Alan Shepherd

4. _____ What is the significance of John Glenn?
 - a. He was the first man to walk on the moon
 - b. He was the US President who started America's space program
 - c. He was the primary designer of all of America's space technology
 - d. He was the first American to orbit the Earth

5. _____ Why is Neil Armstrong significant?
 - a. He was the first man to walk on the moon
 - b. He was a top-ranking general who ordered a halt to the space program
 - c. He was the director of NASA
 - d. He was the first American astronaut

TRUE/FALSE: *Indicate whether the statement is true or false. If the statement is false, write the correct word in the space provided to make the statement true.*

6. _____ On October 4, 1957, Germany became the first nation to launch an artificial satellite into orbit around the planet. _____

7. _____ The first US satellite was known as Explorer I. _____

8. _____ After the launch of Sputnik 1, many Americans panicked, viewing this as proof that the American housing system was far behind the Soviets. _____

9. _____ On May 25, 1961, President Richard Nixon made a bold announcement that the US would land on the moon before the end of the 1960s.

10. _____ Neil Armstrong became the first human to set foot on the surface of the moon.

Student Response: *Write a paragraph addressing the questions raised below. A thorough response should consist of at least five complete sentences.*

1) After the Soviets managed to get an early lead in the Space Race, the United States restructured their education system and placed a greater emphasis on math and science courses in the public schools. Which school subjects do you think should be stressed the most and why?

2) After reading the Space Race and other lessons thus far, do you feel that the rivalry between the US and the USSR helped to advance the two nations and push them forward in any way? If so, what are some examples of this? If not, explain why you feel it is not the case.

3) Do you feel that the United States should strive to be the world leader in satellite technology and space exploration? If so, should agencies such as NASA receive more funding, or should the undertaking be turned over to privately-owned companies? Explain your answers.

Space Race Vocabulary: *Utilize the lessons in this unit to match the correct term with the appropriate definition.*

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|-------------------|-----------------|
| a. Explorer I | f. Yuri Gagarin |
| b. Alan Shepherd | g. NASA |
| c. Apollo 11 | h. John Glenn |
| d. Neil Armstrong | i. Curriculum |
| e. Sputnik | j. Satellite |

1. _____ The first artificial satellite launched into orbit by the Soviet Union.
2. _____ The first American to orbit the planet.
3. _____ A natural or artificial object that revolves around a larger object in space.
4. _____ The administration created to help the United States achieve its goals in space.
5. _____ The first American satellite launched into orbit.
6. _____ The first man to walk on the moon.
7. _____ The first American in space.
8. _____ The regular course of study in schools.
9. _____ The spacecraft which carried the first astronauts to land on the moon.
10. _____ A Soviet cosmonaut who became the first man to orbit the planet.

Guided Reading: *Fill in the blanks below to create complete sentences.*

11. The space race began when the Soviet Union launched _____.
12. Sputnik was the first artificial (or manmade) _____ to orbit the Earth.
13. The Americans responded to Sputnik by launching their own satellite known as _____.
14. Americans panicked after the launch of Sputnik and restructured school _____ to place more emphasis on science and math courses.
15. The United States created a government agency known as _____ to help them accomplish their goals in space.
16. The Soviet cosmonaut _____ became the first man in space as well as the first to orbit the planet.
17. The first American in space was _____.
18. _____ became the first American to orbit the planet.
19. Neil Armstrong, Buzz Aldrin, and Michael Collins traveled to the moon in _____.
20. As _____ stepped onto the moon, he said, "That's one small step for man, one giant leap for mankind."