



In the late 1950s, during the Cold War, the United States and the Soviet Union engaged in a battle of space technology, known as the Space Race.

HISTORICAL BACKGROUND

- Following the forced surrender of Japan brought about by the atomic bombs dropped on Hiroshima and Nagasaki, the superpowers of the U.S. and Soviet Union became more concerned about the possibility of nuclear war.
- As a result, both nations engaged in an arms race where they competed for supremacy in the quantity and quality of weapons.
- The USSR and the U.S. feared the possibility of Mutually Assured Destruction (MAD), a military doctrine which states that there is no opportunity for a peace agreement in a nuclear war. Hence, Nuclear Arms Control Treaties were continuously signed.



- With the arms race between the U.S. and USSR, both countries began to develop Intercontinental Ballistic Missiles or ICBMs, which were designed to reach long-range targets as far away as 3,500 miles.
- The arms race also led other nations, including Great Britain, France, and the People's Republic of China to build and stockpile their own nuclear weapons.
- In the mid-1950s until the early 1960s, tensions between the Soviet Union and the United States continued with the Space Race, construction of the Berlin Wall, and crises in Cuba, Korea, and Vietnam.

SOVIET SPUTNIK AND AMERICAN APOLLO

- On October 4, 1957, the USSR's Sputnik, Russian for "traveler," became the first artificial (manmade) satellite to reach the orbit of the Earth. Sputnik's launch was a shock for most Americans. It was unexpected, thus exposing the next frontier of exploration. Such activity threatened the United States with possible nuclear warhead and intelligence information gathering from space.
- In response, the United States Army launched Explorer I, an American satellite, in 1958. For further space exploration, President Dwight Eisenhower created NASA or the National Aeronautics and Space Administration.
- Moreover, President Eisenhower established two securityoriented space programs under the U.S. Air Force and the CIA.
- In 1959, the Soviets launched Luna 2 which targeted the moon. Two years later, Soviet cosmonaut Yuri Gagarin set a record by being the first man to orbit the Earth.

- The Americans responded through Project Mercury which sent chimpanzees into space in a capsule-shaped craft.
- On May 5, 1961, Alan Shepard became the first American in space.
- On May 25, 1961, at the height of the Cold War, U.S. President John F. Kennedy declared a national goal of sending man to the moon at the Congress joint session. Kennedy's decision was because of Soviet success in sending cosmonaut Yuri Gagarin into space in April, 1961. He specifically wanted to catch up to and overtake the Soviet Union in what we know today as the Space Race.
- Several NASA projects like Mercury, Gemini and Apollo were developed to realize Kennedy's vision.
- By September 12, 1962, JFK delivered his famous quote, "We choose to go to the Moon" in front of a large crowd at Rice Stadium, Houston, Texas.



- JFK specifically tasked Vice President Lyndon B. Johnson to oversee the project of the National Aeronautics and Space Council.
- After Kennedy's assassination on November 22, 1963, the idea of a joint moon landing was abandoned, but NASA's Apollo mission became a memorial for him.

JFK at Rice University, 1962

- Apollo 11 was the fifth manned mission under the Apollo program.
- On July 16, 1969, three American astronauts, Neil Armstrong, Buzz Aldrin, and Michael Collins, left the Kennedy Space Center in Houston, Florida, to fulfill NASA's Apollo 11 mission and JFK's vision. They traveled 240,000 miles for three days to reach the moon's lunar orbit.



Apollo 11 astronauts Neil Armstrong, Michael Collins, and Buzz Aldrin

Aldrin erected the Stars and Stripes flag of the United States



- The success of Apollo 11 established the United States' national and international dominance over rival countries. It also demonstrated the economic, political, and technological virtuosity of Americans. Lastly, such achievement opened up possibilities for further aerospace exploration.
- Between 1969 and 1972, the Soviets failed in four of its moon missions.
- The Space Race was highly coveted in television. Astronauts in the United States and cosmonauts in the USSR were seen as national heroes.
- The momentous 'handshake in space' between American astronauts and Soviet cosmonauts in the joint Apollo-Soyuz mission in 1975 marked the gradual refinement of the American-Soviet relations.

Things in Space

In the middle of the Cold War, the USSR and the U.S. heavily ventured into space exploration. Can you identify and describe fascinating objects in space?

First Man in Space



On April 12, 1961, Soviet cosmonaut Yuri Gagarin became the first person in space. Using the Vostok spacecraft, Gagarin led the Soviets in its Space Race against the Americans. Can you write a short biographical narrative about him? You can use KidsKonnect's premium space worksheets to help you out.

YURI GAGARIN

Legacy as Cosmonaut

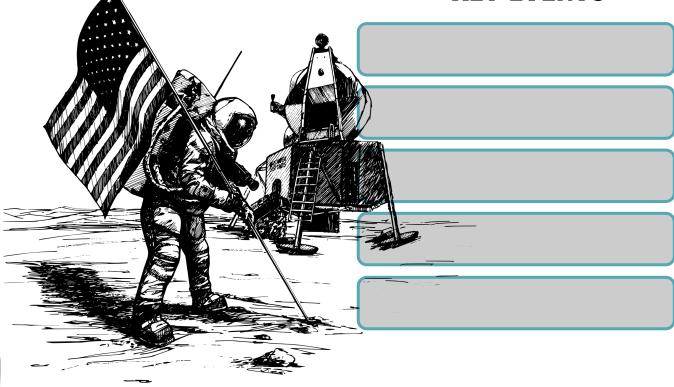




On July 20, 1969, JFK's long space vision was realized through the successful moon landing of Apollo 11. Can you complete the profile of this space mission?

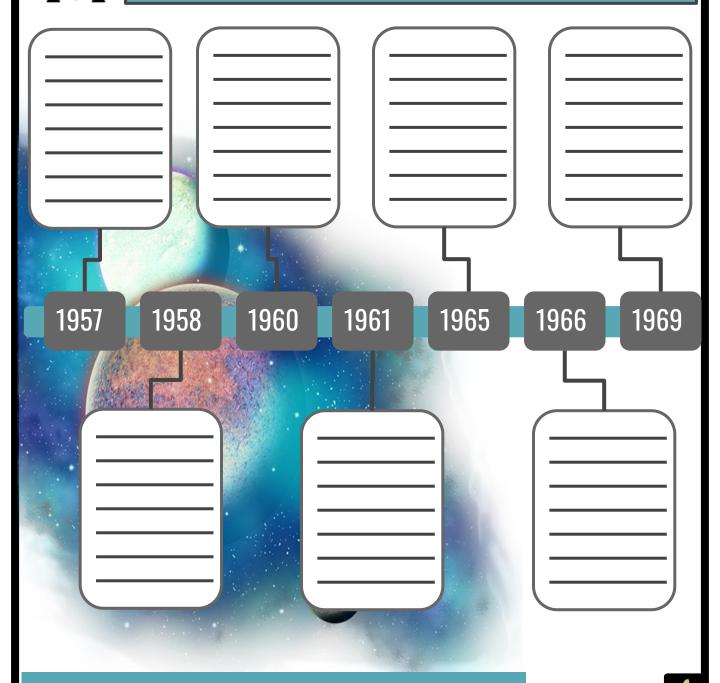






Space Race Log

Following the Soviet-American arms race, both ventured into space exploration to prove technological advancement. Complete the timeline with key events concluding the Space Race.



JFK and Space

On September 12, 1962, U.S. President John F. Kennedy addressed the United States about the next mission of American moon landing. Analyse JFK's speech using the guide questions. Use an additional sheet of paper as necessary.

Watch JFK's speech using this link: https://www.youtube.com/watch?v=WZyRbnpGyzQ



GUIDE QUESTIONS

1. What was JFK's speech all about?

2. What were the developments of mankind he mentioned?

3. How significant was space exploration during this time in history?



Cold War Facts

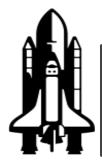


The Space Race was part of a larger conflict between the United States and the USSR known as the Cold War. Based on the symbols given, provide facts about the Cold War.





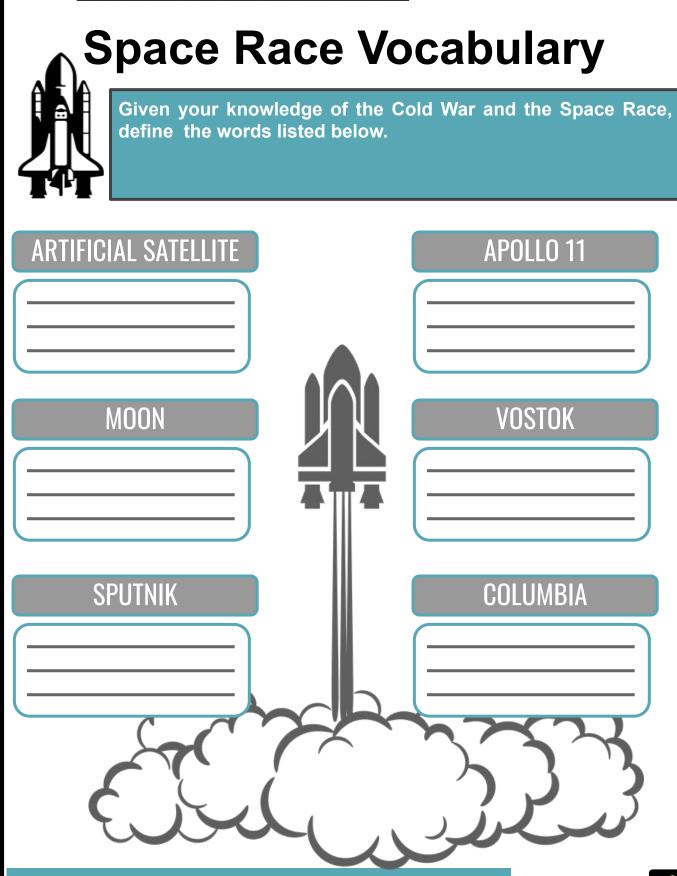
Moon Landing



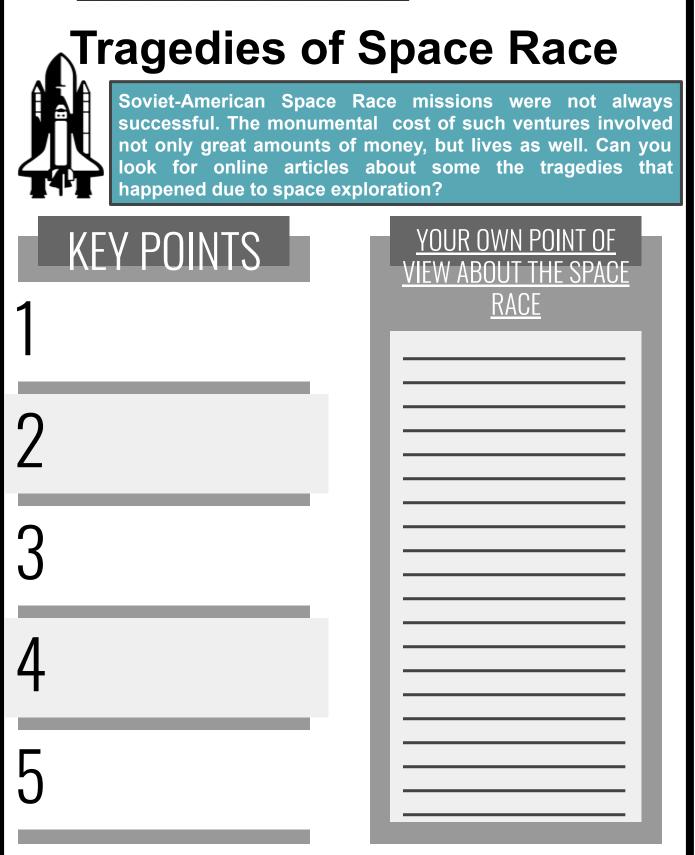
The Space Race, which began with the Soviet Sputnik, ended with the American Apollo 11 landing. Now, write a news headline highlighting the moon landing and the end of the Space Race.

HEADLINE:

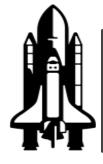






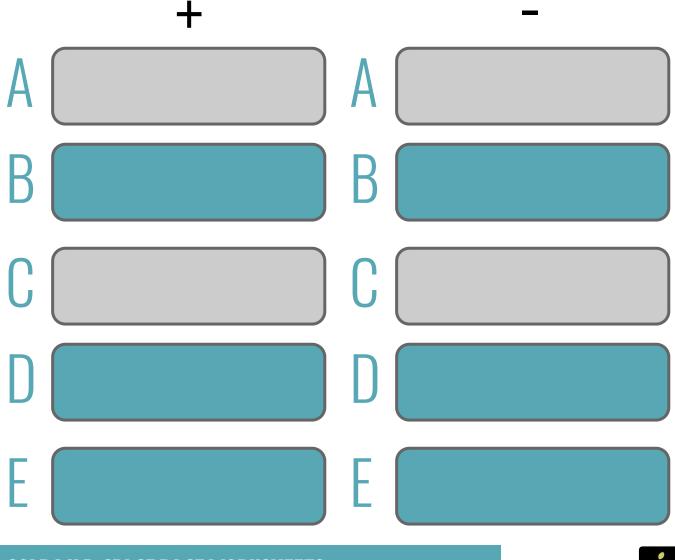


End of the Race



Many believe that the United States won the Space Race. Following the successful Apollo 11 landing, several missions were sent. Based on your assessment of the Cold War and the Space Race, list the positive and negative consequences of this event.

Consequences of the Space Race



COLD WAR: SPACE RACE WORKSHEETS

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