



A Math and Science @ Work Special Series

CELEBRATING APOLLO

AP* US HISTORY Educator Edition



THE PRESIDENTS AND THE DEVELOPMENT OF NASA

Instructional Objectives

Students will

- analyze primary and secondary source documents to be used as supporting evidence;
- incorporate outside information (information learned in the study of the course) as additional support; and
- write a well-developed argument that answers the document-based essay question about the presidential roles in the development of the space program.

Degree of Difficulty

For the average AP US History student the problem may be at a moderate difficulty level.

Background

This problem is part of a series of Social Studies problems celebrating the contributions of NASA's Apollo Program.

On May 25, 1961, President John F. Kennedy spoke before a special joint session of Congress and challenged the country to safely send and return an American to the Moon before the end of the decade. President Kennedy's vision for the three-year old National Aeronautics and Space Administration (NASA) motivated the United States to develop enormous technological capabilities and inspired the nation to reach new heights.

Eight years after Kennedy's speech, NASA's Apollo program successfully met the president's challenge. On July 20, 1969, the world witnessed one of the most astounding technological achievements in the 20th century. Neil Armstrong and Edwin "Buzz" Aldrin became the first humans to set foot on the Moon, while Mike Collins orbited the Moon in the Command Module. Armstrong's words, "That's one small step for [a] man, one giant leap for mankind," were heard around the world and inspired a generation. This amazing accomplishment required the collaboration of hundreds of thousands of determined individuals and the committed resources of our nation.

One of the events leading up to Kennedy's announcement was the Soviet Union's successful launch of Sputnik I on October 4, 1957, followed one

Grade Level

10-11

Key Topic

The role of the presidents from 1957 – 1972 in the space program

Degree of Difficulty

Moderate

Teacher Prep Time

2 hours

Problem Duration

60 minutes:

- 15 minute document analysis
- 45 minute essay writing

AP Course Topics

- The United States and the Early Cold War
- The 1950's
- The Turbulent 1960's
- Politics and Economics at the End of the Twentieth Century

NCSS Social Studies Standards

- Time, Continuity and Change
- People, Places and Environments
- Science, Technology and Society
- Globalization

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month later by Sputnik II. Americans had become accustomed to viewing their country as a world leader and this sequence of events threatened the very core of that belief. The confidence of a nation had been undermined. This was at the height of the Cold War and the U.S. feared that the Soviets could use their technological capabilities to gain allies from the uncommitted nations around the world. Militarily, the U.S. worried that if the Soviets could propel objects into outer space then they had the capability to launch a missile that could destroy peace on their home soil; an event previously unimaginable.

The U.S. felt there was no other option but to enter the space race. In response to the fear and competition, President Eisenhower established NASA. Part of NASA's official mission was "to provide for research into the problems of flight within and outside the Earth's atmosphere." Kennedy's challenge focused the agency on a specific goal within that mission. Sending a man to the Moon led to the U.S. regaining its confidence as it entered a leadership role in space exploration. Eisenhower, Kennedy, and the presidents that followed, all played dynamic roles in the development America's space policy. Their vision for space exploration guided the Apollo program in getting man to the Moon and continues to inspire and guide us as we prepare to return to the Moon and discover Mars.

For more information about NASA's Apollo program visit www.nasa.gov.

Themes in AP U.S. History

- American Identity
- Globalization
- War and Diplomacy

AP Course Topics

The United States and the Early Cold War

- Diplomatic strategies and the policies of the Eisenhower and Kennedy Administrations

The 1950's

- Impact of changes in science, technology, and medicine

The Turbulent 1960's

- From the New Frontier to the Great Society
- The antiwar movement and the counterculture

Politics and Economics at the End of the Twentieth Century

- Nixon's challenges: Vietnam, China, and Watergate

NCSS Social Studies Standards

- Time, Continuity, and Change
- Power, Authority, and Governance
- Science, Technology, and Society
- Global Connections



Document-Based Essay Question (DBQ)

Directions

The following question requires you to construct a coherent essay that integrates your interpretation of documents A – J *and* your knowledge of the period referred to in the question. High scores will only be earned by essays that both cite key pieces of evidence from the documents and draw on outside knowledge of the period.

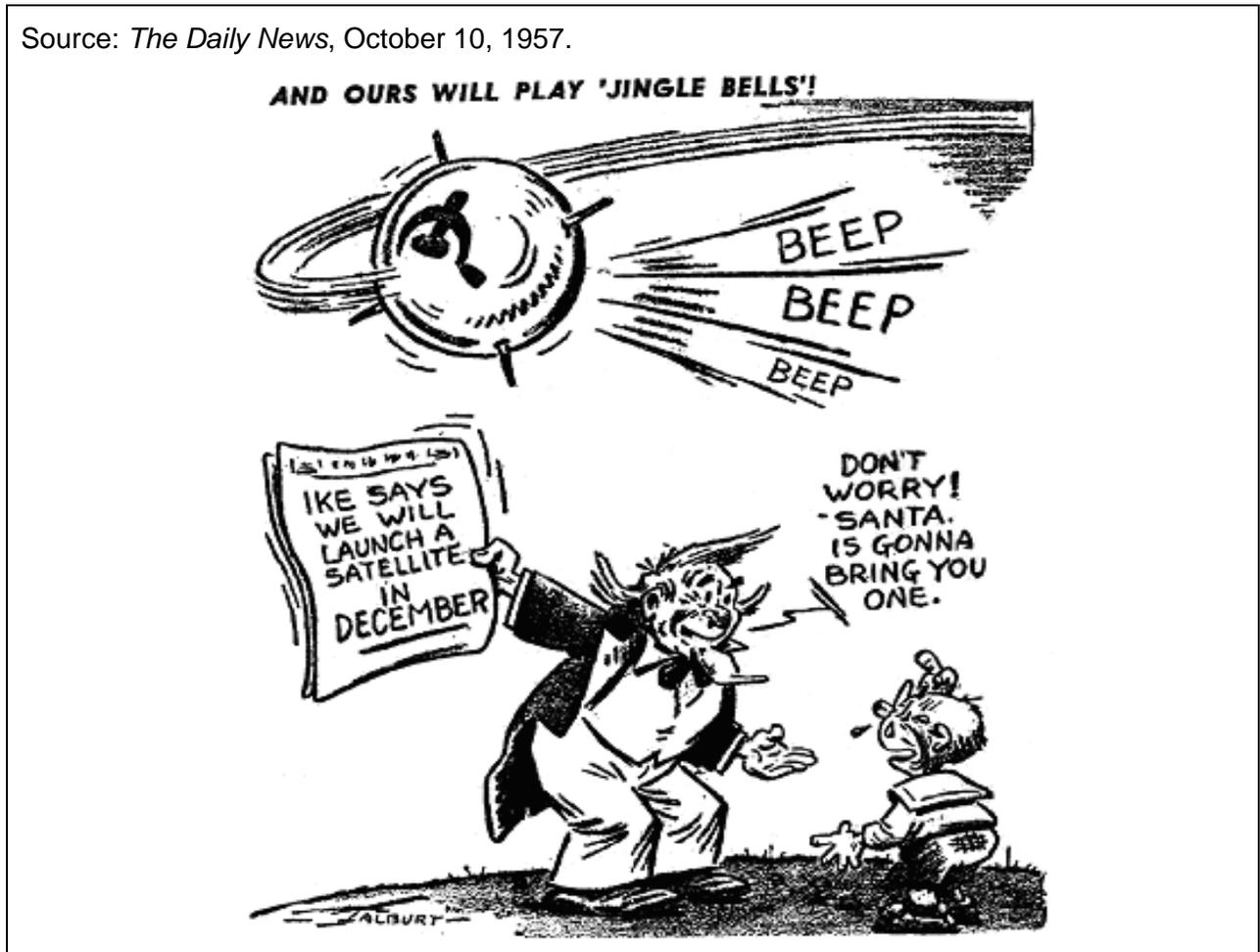
Question

Evaluate the role that Presidents Eisenhower, Kennedy, Johnson, and Nixon played in the development of the space program. How effective were their responses in meeting the challenges of the space race?

Use the documents and your knowledge of the time period 1957-1972 to construct your response.

Document A

Source: *The Daily News*, October 10, 1957.



**Document B**

Source: The Dwight D. Eisenhower Library, Statement by the President, Dwight D. Eisenhower, July 29, 1958.

"I have today signed H.R. 12575, the National Aeronautics and Space Act of 1958.

The enactment of this legislation is an historic step, further equipping the United States for leadership in the space age. I wish to commend the Congress for the promptness with which it has created the organization and provided the authority needed for an effective national effort in the fields of aeronautics and space exploration...

...The present National Advisory Committee for Aeronautics (NACA), with its large and competent staff and well-equipped laboratories, will provide the nucleus for the NASA. The NACA has an established record of research performance and of cooperation with the Armed Services. The combination of space exploration responsibilities with the NACA's traditional aeronautical research functions is a natural evolution.

The enactment of the law establishing the NACA in 1915 proved a decisive step in the advancement of our civil and military aviation. The Aeronautics and Space Act of 1958 should have an even greater impact on our future."

Document C

Source: Roger D. Launius, "Eisenhower and Space: Politics and Ideology in the Construction of the U.S. Civil Space Program," Jan 2005.

"...Eisenhower wanted to move ahead in small, incremental steps that would not overpower the budget. This attitude upset parts of the scientific and military communities as not being aggressive enough, especially in light of recent Soviet advances in space technology. Eisenhower was not worried about this; his hidden agenda was sending reconnaissance satellites over Soviet bloc countries. Although he did not want to create a new agency, he did so to relieve political pressure, but limited its scope and funding..."



Document D

Source: *New York Times*, November 26, 1961 (reprint of a cartoon from the San Diego Union).





Document E

Source: John F. Kennedy Presidential Library and Museum, Memo for Vice-President (Johnson) from President Kennedy, April 20, 1961.

THE WHITE HOUSE

WASHINGTON

April 20, 1961

MEMORANDUM FOR

VICE PRESIDENT

In accordance with our conversation I would like for you as Chairman of the Space Council to be in charge of making an overall survey of where we stand in space.

1. Do we have a chance of beating the Soviets by putting a laboratory in space, or by a trip around the moon, or by a rocket to land on the moon, or by a rocket to go to the moon and back with a man. Is there any other space program which promises dramatic results in which we could win?
2. How much additional would it cost?
3. Are we working 24 hours a day on existing programs. If not, why not? If not, will you make recommendations to me as to how work can be speeded up.
4. In building large boosters should we put out emphasis on nuclear, chemical or liquid fuel, or a combination of these three?
5. Are we making maximum effort? Are we achieving necessary results?

I have asked Jim Webb, Dr. Weisner, Secretary McNamara and other responsible officials to cooperate with you fully. I would appreciate a report on this at the earliest possible moment.



Document F

Source: *Los Angeles Herald-Examiner*, July 18, 1969.

Fulfillment

by Karl Hubenthal





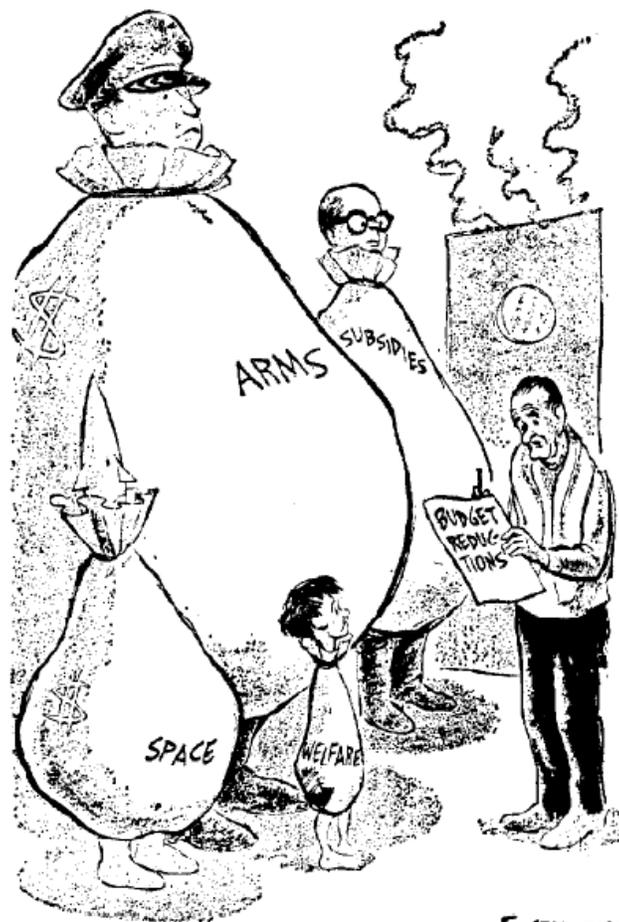
Document G

Source: The Lyndon B. Johnson Library, 1966 State Department's Policy Planning Council, "Space Goals After the Lunar Landing," by Assistant Secretary of State Henry Owen (Chairman of the State Department's Policy Planning Council) to Walt Rostow.

"...Even before the outcome of the moon race has been decided, we face the question of whether to commit ourselves to...proceeding with manned exploration of the moon after the initial landing...if we can de-emphasize or stretch out additional costly programs aimed at the moon and beyond, resources may to some extent be released for other objectives which might serve more immediate higher priority interests...nonetheless, I believe it right (because) it will save money, which can go to foreign aid and domestic purposes-thus mitigating the political strain of the war in Vietnam..."

Document H

Source: *The Philadelphia Inquirer*, June 9, 1968.



From the St. Louis Post-Dispatch

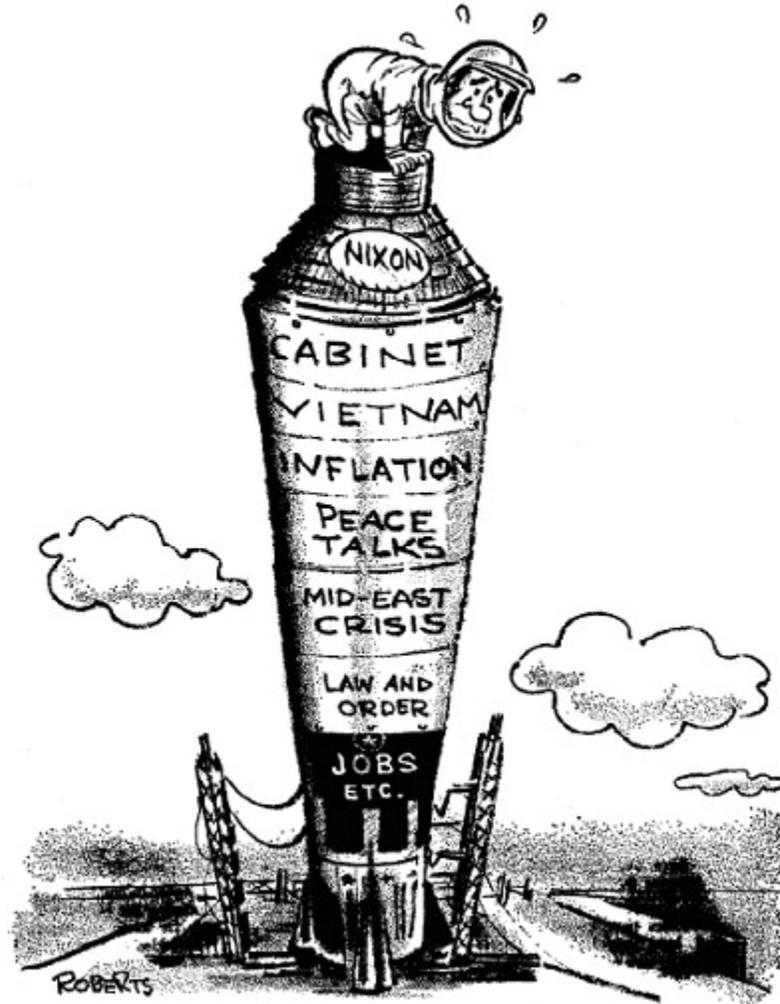
'Let's see, we've got to get some of you
slimmed down.'



Document I

Source: *Washington News*, December 10, 1968.

GETTING CLOSER TO COUNTDOWN



Document J

Source: President Nixon's Announcement on the Space Shuttle given in San Clemente, California, January 5, 1972.

"...The New Year 1972 is a year of conclusion for America's current series of manned flights to the moon...This is why commitment to the space shuttle program is the right step for America to take, in moving out from our present beach-head in the sky to achieve a real working presence in space because the space shuttle will give us routine access to space by sharply reducing costs in dollars and preparation time..."

July 24, 1969, Overall view of Mission Operations Control Room (MOCR) in the Mission Control Center (MCC), Building 30, Manned Spacecraft Center (MSC), showing the flight controllers celebrating the successful conclusion of the Apollo 11 lunar landing mission.



Scoring Guide

Evaluate the role that Presidents Eisenhower, Kennedy, Johnson, and Nixon played in the development of the space program. How effective were their responses in meeting the challenges of the space race?

8-9

- Contains a clear, well-developed thesis that delineates the degree of success or failure of the presidents in the development of the space program.
- Supports thesis with substantial, relevant information covering the time period and presidential roles.
- Provides effective analysis of presidential roles.
- Effectively uses a substantial number of documents.
- Supports the thesis with substantial and relevant outside information.
- Understands the complexity of the question.
- May contain minor errors that do not detract from the overall essay.

5-7

- Acceptable thesis that addresses the development of presidential roles
- Supports thesis with some factual information relevant to the question.
- Addresses the question in a general way; may lack depth.
- Effectively uses some documents.
- Supports the thesis with some relevant outside information.
- Provides limited analysis.
- May contain errors.

2-4

- Contains an undeveloped thesis about the role of the presidents.
- Lacks supporting information relevant to the question.
- Merely paraphrases, quotes, or briefly cites documents.
- Contains little outside information or information that is inaccurate or irrelevant.
- Provides little or no analysis.
- May contain major errors.

0-1

- Does not contain a thesis.
- May simply paraphrase or restate the question.
- Demonstrates little or no understanding of the question.
- Completely off topic.



Possible Outside Information

The 1950's

- The Cold War
- Sputnik
- NASA Space Council
- National Defense Education Act
- U-2 Incident
- Cancelled Summit with the Soviets
- Eisenhower's Corona Program
- Senator Lyndon Johnson's support of space for US Security after Sputnik
- Eisenhower's Farewell Address
- Development of the Military-Industrial Complex

The 1960's

- Missile Gap
- Space Race
- Kennedy's New Frontier
- Bay of Pigs Invasion
- Cuban Missile Crisis
- Building of the Berlin Wall
- Vietnam War
- Kennedy's Assassination
- Johnson's Great Society
- War on Poverty
- NASA's location in Houston
- Impact of the year 1968: TET Offensive, War demonstrations, Johnson's decision not to run for re-election, election of Richard Nixon
- Congressional hostility towards the Apollo program after the 1967 fire
- Legacy of Johnson: started and ended "the Space Race"

The 1970's

- Nixon and the Vietnam War
- US economic issues: Inflation, Stagnation
- Creation of the Space Shuttle Program



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Celebrating Apollo – The Presidents and the Development of NASA

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Or type your responses in an email and send to: natalee.lloyd@tietronix.com

Please circle the appropriate response and include an explanation where desired.

1. This problem successfully accomplished the stated instructional objectives. YES NO

2. The problem was at an appropriate level of rigor to be used in an AP class. YES NO

3. The problem will help prepare students to answer document-based essay questions on the AP exam. YES NO

4. I will use this problem again. YES NO

5. Please provide suggestions for improvement of this problem and associated material:

Thank you for your participation.