ENGLISH LANGUAGE AND COMPOSITION SECTION II

Total time—2 hours

Question 1

(Suggested time—40 minutes. This question counts for one-third of the total essay section score.)

Directions: The following prompt is based on the accompanying eight sources.

This question requires you to synthesize a variety of sources into a coherent, well-written essay. When you synthesize sources, you refer to them to develop your position and cite them accurately. *Your argument should be central; the sources should support the argument. Avoid merely summarizing sources.*

Remember to attribute both direct and indirect references.

Introduction

Explorers and tales of explorations tend to capture the human imagination. However, such explorations have financial and ethical consequences. Space exploration is no exception.

Assignment

Read the following sources (including the introductory information) carefully. Then, in an essay that synthesizes at least three of the sources, develop a position about what issues should be considered most important in making decisions about space exploration.

You may refer to the sources by their titles (Source A, Source B, etc.) or by the descriptions in parentheses.

Source A (Livingston)

Source B (Photo)

Source C (Chamberlain)

Source D (NIH)

Source E (McLean)

Source F (Greenberg)

Source G (Collins)

Source H (Roberts)

Source A

Livingston, David. "Is Space Exploration Worth the Cost?" 21 Jan. 2008. The Space Review: Essays and Commentary About the Final Frontier. 4 March 2008 http://www.thespacereview.com/article/1040/1.

The following is from the Web page of a person dedicated to space travel.

In my opinion, the manned space exploration program is absolutely worth the cost. The money spent on manned space exploration is spent right here on Earth and most of it is spent in the US. We do not yet have a Bank of the Milky Way, the First International Bank of Mars, or a Lunar Mutual Savings and Loan. The money that is spent goes to manufacturing, research and development, salaries, benefits, insurance companies, doctors, teachers, scientists, students, blue- and white-collar workers, and corporations and businesses both large and small. The money disperses throughout the economy in the same way as money spent on medical research, building houses, or any other activity we engage in with government or even private spending.

We have our work cut out for us as we move forward in this new century. We don't seem to get along well with each other here on Earth, but we do quite well in space. Space is our model for all nations. Notice how many more nations are talking about and wanting to get into the manned space act. India, Russia, China, Japan, and the European Space Agency, for starters, all want a manned mission to the Moon and it won't stop there. These countries and agencies know that manned space exploration builds wealth for their nation, solves problems and enhances life for their people right here on Earth, and shows us the way for how we can all live together in peace.

Manned space exploration is absolutely worth the investment. It's not just about what we learn out there in space, or about ourselves, or how to be a better steward of precious Earth. It's about how we live here on Earth together and what type of future we want for ourselves and children. Manned space exploration is the path to how we build a better life for ourselves here on Earth, and how we can give hope and provide inspiration for our youngsters to grow up, do the schoolwork, and accept the challenges that await them to make our world even better. Whatever we spend on manned space exploration is a bargain and our investment will be returned to us many times over, both quantitatively and qualitatively.

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Source B

National Aeronautics and Space Administration (NASA) photo

The following photo is taken from the NASA photo archive.



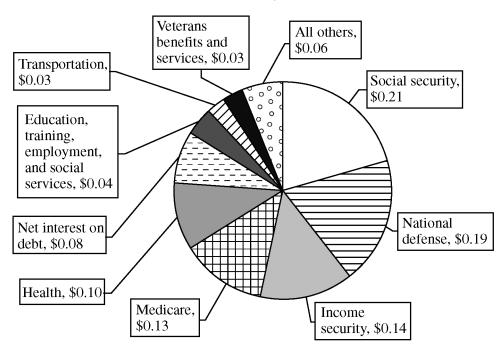
Photo Credit: NASA

Source C

Chamberlain, Andrew. "Pennies of Each Federal Spending Dollar." 7 Apr. 2006. The Tax Foundation. 1 March 2008 http://www.taxfoundation.org/blog/printer/1420.html.

The following are two visual representations of the same information about how each federal tax dollar is spent.

PENNIES OF EACH FEDERAL DOLLAR SPENT ON VARIOUS PROGRAMS, 2006 ESTIMATES



Pennies of Each Federal Dollar Spent on Various Programs, 2006 Estimate

Function	Amount
Social security	\$ 0.21
National defense	\$ 0.19
Income security	\$ 0.14
Medicare	\$ 0.13
Health	\$ 0.10
Net interest on debt	\$ 0.08
Education, training, employment, and	\$ 0.04
social services	
Transportation	\$ 0.03
Veterans benefits and services	\$ 0.03
All others*	\$ 0.06
Total	\$ 1.00

^{*}Includes community and regional development; administration of justice; international affairs; natural resources and environment; agriculture; general science; space and technology; general government; commerce and housing credit; energy; and undistributed offsetting receipts.

Source: Office of Management and Budget, Analytical Perspectives, Budget of the United States Government, Fiscal Year 2007 (available at http://www.whitehouse.gov/omb/budget/fy2007/); Tax Foundation calculations.

Source D

<u>National Institutes of Health</u>. 26 Feb. 2008 http://www.nih.gov/about/NIHoverview.html>.

The following is a description of the National Institutes of Health (NIH), a government-funded agency whose mission is to improve health.

The Nation's Medical Research Agency

The National Institutes of Health (NIH), a part of the U.S. Department of Health and Human Services, is the primary Federal agency for conducting and supporting medical research. Helping to lead the way toward important medical discoveries that improve people's health and save lives, NIH scientists investigate ways to prevent disease as well as the causes, treatments, and even cures for common and rare diseases. Composed of 27 Institutes and Centers, the NIH provides leadership and financial support to researchers in every state and throughout the world. . . .

In the past several decades, NIH-supported research, and its national programs to communicate the results of research, played a major role in achievements such as:

- Death rates from heart disease and stroke fell by 40% and 51%, respectively, between 1975 and 2000.
- The overall five-year survival rate for childhood cancers rose to nearly 80% during the 1990s from under 60% in the 1970s.
- The number of AIDS-related deaths fell by about 70% between 1995 and 2001.
- Sudden infant death syndrome rates fell by more than 50% between 1994 and 2000.
- Infectious diseases—such as rubella, whooping cough, and pneumococcal pneumonia—that once killed and disabled millions of people are now prevented by vaccines.
- Quality of life for 19 million Americans suffering with depression has improved as a result of more effective medication and psychotherapy.

Source E

McLean, Margaret R. "To Boldly Go: Ethical Considerations for Space Exploration." Feb. 2006. Markkula Center for Applied Ethics. 29 Feb. 2008 http://www.scu.edu/ethics/publications/ ethicalperspectives/space-exploration.html>.

The following excerpt appeared on the Web page of a group dedicated to ethics.

In the budget unveiled on Monday, almost \$17 billion will fly into NASA's coffers with around \$5.3 billion dedicated to space exploration. The Crew Exploration Vehicle and Launch Vehicles will be built; new spacecraft on their way to the moon and Mars will be whizzing overhead by 2014. NASA chief Michael Griffin claimed that this new budget would set the stage for "the expansion of human presence into the solar system."

But before we think about exploring—and potentially exploiting—"the final frontier," we would do well to remember that we do not have a very good track record in protecting our planet home. We have expanded human presence into pristine forests resulting in the disruption of migratory routes, soil erosion, and species extinction. What can be learned from our presence on Earth about the potential impact of our forays into the outer reaches of the solar system?

We are the only earthly creatures with the capacity to extend our influence beyond the 4 corners of the globe. This puts on us the responsibility to acknowledge that, despite the depths of space, it is not so limitless as to be able to weather mistreatment or suffer every demand we may place on it.

One way to think about expanding our presence in the solar system is through the lens of stewardship. Stewardship envisions humans not as owners of the solar system but as responsible managers of its wonder and beauty.

Stewardship holds us accountable for a prudent use of space resources. Such responsibility may support exploration of the final frontier, but at the same time it warns against exploitation of its resources. We must account for our urges and actions in terms of their impact on others, the universe, and the future.

As we boldly plan to extend ourselves to places where no one has gone before, we would do well to consider the following principles:

- 1. Space preservation requires that the solar system be valued for its own sake, not on the basis of what it can do for us.
- 2. Space conservation insists that extraterrestrial resources ought not to be exploited to benefit the few at the expense of the many or of the solar system itself.
- 3. Space sustainability asks that our explorations "do no harm" and that we leave the moon, Mars, and space itself no worse—and perhaps better—than we found them.

As we expand human presence into the solar system, we ought not to park ethical considerations next to the launching pad. We must take our best ethical thinking with us as we cross the frontier of space exploration.

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Source F

Greenberg, Richard, and B. Randall Tufts. "Infecting Other Worlds." <u>American Scientist</u> Jul.-Aug. 2001. 24 Feb. 2008 http://www.americanscientist.org/issues/num2/2001/7/infecting-other-worlds/1>.

The following is excerpted from an article about spreading infection via space.

Because extraterrestrial life may exist, planetary exploration could bring trouble if people are not careful enough. This danger was recognized decades ago, when astronauts ventured to the Moon. When the crews returned, they were quarantined to prevent "back contamination," the hazard that some infectious extraterrestrial germ might be riding with them. The safety procedures were largely symbolic: After all, who knew the incubation period for some hypothetical other-worldly microbe? Whether the hardware and samples returned needed sterilization was also largely a matter of speculation. Subsequent planetary exploration has not involved astronauts, nor have samples or hardware been returned, so back contamination has not been an issue. But forward contamination—that is, the infection of alien ecosystems by terrestrial organisms hitchhiking on a spacecraft—is a distinct possibility.

American Scientist, magazine of Sigma Xi, The Scientific Research Society.

Source G

Collins, Michael. <u>Carrying the Fire: An Astronaut's</u>
<u>Journeys</u>. New York: Farrar, Straus and Giroux,
1974.

The following is excerpted from a book written by one of the first astronauts in space.

I really believe that if the political leaders of the world could see their planet from a distance of, let's say, 100,000 miles, their outlook would be fundamentally changed. That all-important border would be invisible, that noisy argument suddenly silenced. The tiny globe would continue to turn, serenely ignoring its subdivisions, presenting a unified facade that would cry out for unified understanding, for homogeneous treatment. The earth must become as it appears: blue and white, not capitalist or Communist; blue and white, not rich or poor; blue and white, not envious or envied. I am not a naïve man. I don't believe that a glance from 100,000 miles out would cause a Prime Minister to scurry back to his parliament with a disarmament plan, but I do think it would plant a seed that ultimately could grow into such concrete action. Just because borders are invisible from space doesn't mean that they're not real—they are, and I like them. . . . What I am saying, however, is that all countries must begin thinking of solutions to their problems which benefit the entire globe, not simply their own national interests. The smoke from the Saar Valley may pollute half a dozen other countries, depending on the direction of the wind. We all know that, but it must be seen to make an indelible impression, to produce an emotional impact that makes one argue for long-term virtues at the expense of short-term gains. I think the view from 100,000 miles could be invaluable in getting people together to work out joint solutions, by causing them to realize that the planet we share unites us in a way far more basic and far more important than differences in skin color or religion or economic system. The pity of it is that so far the view from 100,000 miles has been the exclusive property of a handful of test pilots, rather than the world leaders who need this new perspective, or the poets who might communicate it to them.

Source H

Roberts, Russell. "Funding Space Travel." Morning Edition. 26 Jan. 2004. National Public Radio. Transcript. 19 Feb. 2008
http://www.invisibleheart.com/lheart/PolicySpace.html.

The following excerpt is the text of an oral commentary aired on the radio.

I own a telescope.

I own a lot of books on the nighttime sky and cosmology and the big bang.

I get goose bumps when I see a picture of the earth from space.

The Imax space movies bring tears to my eyes.

But I get no thrill from the Bush plan to put Americans on Mars.

As much as I like space and the idea of people on Mars, I don't see the case for using taxpayer money to get it done. Don't tell me about all the spin-off technologies Leave the money here on earth.

By permission of Professor Russell Roberts.

AP® ENGLISH LANGUAGE AND COMPOSITION 2009 SCORING GUIDELINES

Question 1

The score should reflect a judgment of the essay's quality as a whole. Remember that students had only 15 minutes to read the sources and 40 minutes to write; the essay, therefore, is not a finished product and should not be judged by standards appropriate for an out-of-class assignment. Evaluate the essay as a draft, making certain to reward students for what they do well.

All essays, even those scored 8 or 9, may contain occasional lapses in analysis, prose style, or mechanics. Such features should enter into the holistic evaluation of an essay's overall quality. In no case may an essay with many distracting errors in grammar and mechanics be scored higher than a 2.

9 Essays earning a score of 9 meet the criteria for a score of 8 and, in addition, are especially sophisticated in their argument, thorough in development, or impressive in their control of language.

8 Effective

Essays earning a score of 8 **effectively** develop a position on what issues should be considered most important in making decisions about space exploration. They develop their position by effectively synthesizing* at least three of the sources. The evidence and explanations used are appropriate and convincing. Their prose demonstrates a consistent ability to control a wide range of the elements of effective writing but is not necessarily flawless.

7 Essays earning a score of 7 meet the criteria for a score of 6 but provide more complete explanation, more thorough development, or a more mature prose style.

6 Adequate

Essays earning a score of 6 **adequately** develop a position on what issues should be considered most important in making decisions about space exploration. They develop their position by adequately synthesizing at least three of the sources. The evidence and explanations used are appropriate and sufficient. The language may contain lapses in diction or syntax, but generally the prose is clear.

5 Essays earning a score of 5 develop a position on what issues should be considered most important in making decisions about space exploration. They develop their position by synthesizing at least three sources, but how they use and explain sources is somewhat uneven, inconsistent, or limited. The argument is generally clear, and the sources generally develop the student's position, but the links between the sources and the argument may be strained. The writing may contain lapses in diction or syntax, but it usually conveys the student's ideas adequately.

^{*} For the purposes of scoring, synthesis means referring to sources to develop a position and citing them accurately.

AP® ENGLISH LANGUAGE AND COMPOSITION 2009 SCORING GUIDELINES

Question 1 (continued)

4 Inadequate

Essays earning a score of 4 **inadequately** develop a position on what issues should be considered most important in making decisions about space exploration. They develop their position by synthesizing at least two sources, but the evidence or explanations used may be inappropriate, insufficient, or less convincing. The sources may dominate the student's attempts at development, the link between the argument and the sources may be weak, or the student may misunderstand, misrepresent, or oversimplify the sources. The prose generally conveys the student's ideas but may be less consistent in controlling the elements of effective writing.

3 Essays earning a score of 3 meet the criteria for the score of 4 but demonstrate less success in developing a position on what issues should be considered most important in making decisions about space exploration. They are less perceptive in their understanding of the sources, or their explanation or examples may be particularly limited or simplistic. The essays may show less maturity in control of writing.

2 Little Success

Essays earning a score of 2 demonstrate **little success** in developing a position on what issues should be considered most important in making decisions about space exploration. They may merely allude to knowledge gained from reading the sources rather than citing the sources themselves. These essays may misread the sources, fail to develop a position, or substitute a simpler task by merely summarizing or categorizing the sources or by merely responding to the prompt tangentially with unrelated, inaccurate, or inappropriate explanation. The prose of these essays often demonstrates consistent weaknesses in writing, such as grammatical problems, a lack of development or organization, or a lack of control.

- 1 Essays earning a score of 1 meet the criteria for a score of 2 but are undeveloped, especially simplistic in their explanation, weak in their control of writing, or do not cite even one source.
- Indicates an on-topic response that receives no credit, such as one that merely repeats the prompt.
- Indicates a blank response or one that is completely off topic.

Political leaders breathed a righ of relief when world War II ended in 1946. Unforeseen
though at that time was the beginning of a new war; the cold War. When American
officials were notified of the launching of Sputnik 1, the world again held its
breath. The human exploration of space has been debated on across the globe
since that renowned moment. Space exploration, many argue, is directing
attention from and funds from more impostant matters at hand.
Yet, is not it obvious that these "usues" are not important? I say, there are no
issues to consider in making decisions about space exploration. Human greed
and desire should be put in the foretront on all our decisions.
First of all, the human race must expand. We must fill out every corner
of our galaxy to grace it with our presence. Molean in her article is
foolish (Source F). Sew ardship? What does it motter it the Earth crumbles?
Our Earth has given us nothing but problems. Mr. It is home to annoying
creatures who are not human, who display to us their vibrant and loud
colors, making us jealous. It is home to grant mountain ranges that spite
our hopes of being majestic and alluring. McLean warns us of exploitation.
but what does it matter? All that matters is that we live. Even it the
Earth gies that exploration rhall allow is to till our adjaxies with only
humans, the greatest utopian society of all.
Greenberg (Source F) also brings in a nother invalid point. "Back
Contamination" is an atroclous problem, but who can object to "torward
contamination"? Manitest pestiny calls for humans to spread out in
the universe. It these alien ecosystems cannot survive due to our meddling,
then it is hatural selection at work. He as humans are the titlest,
and therefore have the right to destroy everything else.

Space exploration should not be a debate and it is not a debate

Write in the box the number of the question you are answering on this page as it is designated in the exam.
any longer. The answer has already been made clear. Human greed
and desire into the forefront and everything else, no matter how important
into the backburner!
71

Every Kid dreams about going to space. How
for could I thit a baseball on the moon? I bet
I could jump so high. Space is truly a wonder
FOR US all. MANAGERAL HOUSE AND MARKET CONTRACTOR
THE HOLD THE PAST TO MANNEY TO
AStronauts are heroes to everyone. For instance, Apollo
XIII* possiply has the most heroic tall of all
time. They had some technical difficulties on their
trip, and were going to have to manually land the
Space craft on earth. The tricky part has the
MOST go through on space craft on earth you
Steep and the space craft burns up in the
atmosphere too Shallow and the space graft
Will 5 kip aff the earth and Mto 5 pace. The
men of Apollo XIII) landed their craft successary and
became legiends.
Space also has HS practical side. For example
the Svitch from compaters the Size of a poom
to the size of a cord board box was made
So that the astronous could have a computer on
the way too the Moon. This push for technology has
driven out plenty of other devices as well.
The last major advantage of space travel
* there is a picture of a apollo rocted on some ?

on this page as it is designated in the exam. 243
TS its diplomatic effects. The US collaborates some
What with the Chinese and the RUSSIAMS When
It comes to Space Harel. Livingston said, "It shows
USA the ways for how re can all the together in peace
SO IF WE CAN'T live together on earth maybe We
WIN be able to work of out in Space. The
"Space Race" of the Gold War & over, and
Collaberation is now key.
Obviously there are major consequented a greations
SPACE FATSES, Ethical (spancial and of course
the most important one, is it work being nen's lives.
While It is a small amount of tax money used
IN NASA PERCENTAGE WEE, It is SHALL A higher SUM
Of Monex that during a financial crisis and war
coold be used else Where. Source C says that
51x percent of tax money goes to Nasa as well
as ten other major methodism. SO It is most likely
that Misa apts 1885 than a popular for every tax
adlar of course when bylings maybe toglings of
taxe dollars are collected each year, that comes
were alot. The man in Some H, says he loves
Space's our and mighty, but we should reave
the money on earth where it would help
huminary in a more direct marker.
There was so people that do not
, ,

Write in the box the number of the question you are answering on this page as it is designated in the exam. 1 B 3 of 3
wary about the Money but about the ethics.
Source to says that we already correpted outh,
So why should we do the same to space. Is it
really our fight to use the universe to benefit
EATH? I MAT KNOW, ITS a fough grostion. Also,
IF Here B life in spore, are He supposed
to time it.
LOSHY, WE MUST ask outselves What a man's
179 15 WOTH IT IT IS WOTH HAKIM A FEW
SPEPS on Mas, then by all means this is a good
Idea. But the truth of the matter is that
It is not worth a strong on Mars: BUZZ Aldrin is
or man often forgotten in History, but he died am
a Mission to the Moon 5 implation. His craft aught
The an he died will allow a control of the control

Write in the box the number of the question you are answering on this page as it is designated in the exam.	question 1/C
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ethical consequences. The	2 500C
exploration has spent a	(C) + (I)
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mat have no benefits.	inay tax
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AP® ENGLISH LANGUAGE AND COMPOSITION 2009 SCORING COMMENTARY

Question 1

Overview

The synthesis question measures students' ability to develop a position on a given topic by referring to sources. This question also requires that students demonstrate an ability to summarize, paraphrase, and quote properly from these sources and to cite them accurately. This year's question asked students to use at least three of eight provided sources to develop a position about what issues should be considered most important in making decisions about space exploration. Many students had some background knowledge and may have formed some preliminary opinions on the issue of space exploration, but to write on this topic successfully, they had to rely on the information provided in the eight sources. In addition to several textual sources, students were also provided with two visual sources, a photograph of a NASA rocket at the launch pad and information about the federal budget, presented both as a pie chart and in a table.

Sample: 1A Score: 9

This unconventional yet effective essay uses irony and wit as it argues that humanity cannot be contained, that "[w]e must fill out every corner of our galaxy" and "grace it with our presence." While most students' responses took a more direct approach to the answer, making arguments related to keeping Earth safe from alien contamination and to humans being stewards of the cosmos, this student chooses. instead, to respond to the sources with sarcasm, arguing that "[h]uman greed and desire" should be at "the forefront." The student concludes the essay by stating that "everything else, no matter how important," should be put on the "backburner." The language in the essay is skillfully controlled, and the ironic tone is consistent from beginning to end. The response is characterized by an impressive command of language and a thorough development of the argument. Transitions between paragraphs are smooth and demonstrate the interconnectedness of the essay's position. The student synthesizes many of the sources, creating a conversation about the value or insignificance of space exploration. Throughout each step in this process, the student takes issue with the sources, as exemplified by the comment that "Greenburg (Source F) also brings in another invalid point." The student brings prior knowledge to the response at appropriate points ("Manifest Destiny calls for humans to spread out in the universe. . . . We, as humans, are the fittest, and therefore have the right to destroy everything else"). This dark essay shines a sophisticated light on the notions that some less skeptical responses relied upon. However unusual, this essay is an example of a highly effective response.

Sample: 1B Score: 5

The essay opens with a personal response to space exploration, drawing on the student's prior knowledge of American space exploration and the technological advances that it helped to bring about, as well as on Source A. It is not until the fourth paragraph that the essay actually takes a position on the issues that should be considered when making decisions about space travel. While this essay promises a discussion of the ethical, financial, and safety issues related to space exploration, it does not deliver this discussion in a full or critical manner. The student quotes sources without providing much context, often simply writing something like "Source C says. . . ." Additionally, the commentaries on the sources are brief and may require the reader to make inferences about the student's meaning. Although it is sometimes difficult to follow the organization and logic of the essay, the response does take a position and use the sources in an effort to marshal the reader toward a conclusion. The limited information presented and the uneven use of sources are counterbalanced by the student's clear understanding of the prompt and the source materials. This essay contains elements of both an adequate and an inadequate response.

AP® ENGLISH LANGUAGE AND COMPOSITION 2009 SCORING COMMENTARY

Question 1 (continued)

Sample: 1C Score: 1

This underdeveloped and incoherent response demonstrates little success in addressing the prompt. It takes no position on the issues that should be considered when making decisions about space exploration. Although some of the language in the response is drawn from the sources (veiled references to "quantitatively and qualitatively," mention of NASA's "coffers"), there is no evidence that the student has understood the information or points of view presented in the sources. The sources have not been used to build or illuminate the student's response, and no citations appear in the essay. The language and syntax used demonstrate little control of language, often creating confusion at the sentence level.