About this Lesson
Ideally, most lessons in English classrooms would be like this one, blending the skills of close reading, grammar, composition, and thinking. Focusing on a rich text, however brief, analyzing the use of language in it, and using those language techniques to enrich the writer’s own technique—these activities inform and reinforce students’ abilities to form connections among all the aspects of language study. Any short, complex text can form the basis of this kind of lesson.

All of the activities that follow are based on an excerpt from “It All Started with Sputnik,” a nonfiction text by Roger D. Launius. Questions that will assist students in analyzing the passage for close reading and for grammatical and syntactical elements follow. Use only those questions that suit your class and your time constraints. Do not feel that you must cover all the questions. Also included are different types of writing assignments.

It is important to remember that connecting concrete devices such as figures of speech, diction, and syntax to an abstract element such as tone or author’s purpose is initially very difficult for most students. The exercises in this lesson build on students’ prior knowledge on a current topic and guide them to an understanding of how a writer uses rhetorical strategies to characterize his response to the early years of space exploration.

Passages for LTF lessons are selected to challenge students, while lessons and activities make texts accessible. Guided practice with challenging texts allows students to gain the proficiency necessary to read independently at or above grade level.

This lesson, like all LTF PAT lessons, is designed to be completed over several days or even weeks; it is not intended to be an independent student assignment.

Objective
Students will read closely and analytically to determine how a writer chooses diction and figurative language, creates syntactically rich sentences, and organizes ideas to convey his attitude toward the space program.

Level
Grades Nine and Ten
Connection to Common Core Standards for English Language

The activities in this lesson allow teachers to address the following Common Core Standards:

<table>
<thead>
<tr>
<th>Code</th>
<th>Standard</th>
<th>Level of Thinking</th>
<th>Depth of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.1.9-10.1</td>
<td>Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</td>
<td>Understand</td>
<td>III</td>
</tr>
<tr>
<td>R.1.9-10.2</td>
<td>Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.</td>
<td>Analyze</td>
<td>III</td>
</tr>
<tr>
<td>R.1.9-10.3</td>
<td>Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.</td>
<td>Analyze</td>
<td>III</td>
</tr>
<tr>
<td>R.1.9-10.4</td>
<td>Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).</td>
<td>Analyze</td>
<td>III</td>
</tr>
<tr>
<td>R.1.9-10.5</td>
<td>Analyze in detail how an author’s ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).</td>
<td>Analyze</td>
<td>III</td>
</tr>
<tr>
<td>R.1.9-10.6</td>
<td>Determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.</td>
<td>Analyze</td>
<td>III</td>
</tr>
<tr>
<td>R.1.9-10.7</td>
<td>Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.</td>
<td>Evaluate</td>
<td>III</td>
</tr>
<tr>
<td>L.9-10.4</td>
<td>Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9-10 reading and content, choosing flexibly from a range of strategies.</td>
<td>Understand</td>
<td>II</td>
</tr>
<tr>
<td>L.9-10.5</td>
<td>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</td>
<td>Understand</td>
<td>II</td>
</tr>
<tr>
<td>W.9-10.1</td>
<td>Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</td>
<td>Create</td>
<td>IV</td>
</tr>
<tr>
<td>Code</td>
<td>Standard</td>
<td>Level of Thinking</td>
<td>Depth of Knowledge</td>
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<tr>
<td>W.9-10.2</td>
<td>Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</td>
<td>Create</td>
<td>III</td>
</tr>
<tr>
<td>W.9-10.3</td>
<td>Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</td>
<td>Create</td>
<td>IV</td>
</tr>
<tr>
<td>SL.9-10.2</td>
<td>Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.</td>
<td>Evaluate</td>
<td>III</td>
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</table>

Implicitly addressed in this lesson

<table>
<thead>
<tr>
<th>Code</th>
<th>Standard</th>
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</thead>
<tbody>
<tr>
<td>L.9-10.1</td>
<td>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</td>
<td>Understand</td>
<td>I</td>
</tr>
<tr>
<td>L.9-10.2</td>
<td>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</td>
<td>Understand</td>
<td>I</td>
</tr>
<tr>
<td>L.9-10.3</td>
<td>Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</td>
<td>Understand</td>
<td>II</td>
</tr>
<tr>
<td>L.9-10.6</td>
<td>Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</td>
<td>Understand</td>
<td>II</td>
</tr>
<tr>
<td>W.9-10.4</td>
<td>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</td>
<td>Create</td>
<td>III</td>
</tr>
<tr>
<td>W.9-10.10</td>
<td>Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.</td>
<td>Apply</td>
<td>III</td>
</tr>
<tr>
<td>SL.9-10.1</td>
<td>Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.</td>
<td>Understand</td>
<td>II</td>
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</table>
### Connection to Common Core Literacy Standards for History/Social Studies Grades 9-10

<table>
<thead>
<tr>
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<th>Standard</th>
<th>Level of Thinking</th>
<th>Depth of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>RH.9-10.8</td>
<td>Assess the extent to which the reasoning and evidence in a text support the author’s claims.</td>
<td>Evaluate</td>
<td>III</td>
</tr>
<tr>
<td>RH.9-10.9</td>
<td>Compare and contrast treatments of the same topic in several primary and secondary sources.</td>
<td>Analyze</td>
<td>III</td>
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</table>

### Connection to Common Core Literacy Standards for Science and Technical Subjects Grades 9-10

<table>
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<tr>
<th>Code</th>
<th>Standard</th>
<th>Level of Thinking</th>
<th>Depth of Knowledge</th>
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</thead>
<tbody>
<tr>
<td>RST.9-10.6</td>
<td>Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.</td>
<td>Analyze</td>
<td>II</td>
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</tbody>
</table>
LTF Skill Focus
The foundation for LTF English lessons is the Skill Progression Chart that identifies key skills for each domain, beginning with grade 6 and adding more complex skills at each subsequent grade level while reinforcing skills introduced at previous grade levels. The Skill Focus for each individual lesson identifies the skills actually addressed in that lesson.

<table>
<thead>
<tr>
<th>Levels of Thinking</th>
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<tbody>
<tr>
<td><strong>Remember</strong></td>
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<tr>
<td>Close Reading</td>
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<tr>
<td>written, spoken, and visual texts</td>
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<tr>
<td><strong>Reading Strategies</strong></td>
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<tr>
<td>Determining Author’s Purpose</td>
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<tr>
<td>Determining Fact and Opinion</td>
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<td>Determining Main Idea</td>
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<tr>
<td>Inference</td>
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<tr>
<td>Summary</td>
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<tr>
<td><strong>Literary Elements</strong></td>
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<tr>
<td>Detail</td>
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<tr>
<td>Diction</td>
</tr>
<tr>
<td>connotation</td>
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<tr>
<td>denotation</td>
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<tr>
<td>vocabulary</td>
</tr>
<tr>
<td>Imagery</td>
</tr>
<tr>
<td>Tone</td>
</tr>
<tr>
<td>tone determined through diction, imagery, detail, point of view, and syntax</td>
</tr>
<tr>
<td><strong>Figures of Speech</strong></td>
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<tr>
<td>(Figurative Language)</td>
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<tr>
<td>Metaphor</td>
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<tr>
<td>Oxymoron</td>
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<td>Paradox</td>
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<tr>
<td>Simile</td>
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<tr>
<td><strong>Literary Techniques</strong></td>
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<tr>
<td>Allusion</td>
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<tr>
<td>mythological</td>
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<tr>
<td>Hyperbole</td>
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<tr>
<td><strong>Literary Forms</strong></td>
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<td>Nonfiction</td>
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Connections to AP*
Analysis of informational texts is an integral part of the AP English Language Exam. When they sit for this exam, students are expected to read nonfiction texts independently and to evaluate the writer’s diction, language, syntax, and organization to determine his/her purpose and/or attitude toward his/her subject. The free response section of the AP English Language Exam often requires students to evaluate an argument and write a response that defends, challenges, or qualifies that argument.

*Advanced Placement and AP are registered trademarks of the College Entrance Examination Board. The College Board was not involved in the production of this material.

Materials and Resources
- copies of Student Activity
- excerpt from “It All Started with Sputnik”
- YouTube video located at http://www.youtube.com/watch?v=CHaJDq6tBM&feature=related

Assessments
The following kinds of formative assessments are embedded in this lesson:
- guided questions
- sentence imitating
- sentence combining
- narrative writing assignment
- analytical writing assignment
- persuasive writing assignment

Teaching Suggestions
Students who have limited experience with informational nonfiction texts, may need more guidance as they approach a text like this one; even more experienced students will benefit from classroom discussion of the concepts introduced or reinforced in this lesson. Teachers might consider some of the following approaches:
- Read the passage aloud, using context clues to define the vocabulary words listed in the lesson introduction.
- Have students write short summaries immediately after reading each paragraph of the text.
- Ask students to answer the close reading questions in cooperative learning groups and then share responses with the entire class.
- If students are unfamiliar with the grammar concepts in the lesson—indeedntial clauses, prepositional phrases, infinitive phrases, participial phrases, direct objects—teachers may want to take the time to conduct a mini-lesson on these elements before tackling the grammar portion of this lesson.

Answers
Answers for the close reading and composition parts of this lesson are subjective and will vary. To obtain the maximum benefit of the lesson, ask students to go beyond the expected responses.
The following suggested answers are provided for the grammar part of the lesson:

**Activity One:**
1. prepositional phrases: with the launch; of a basketball-size satellite; on October 4, 1957
   independent clause: the Soviet Union ushered in the “Space Age” and changed the world
   The prepositional phrases tell how and when the Soviet Union created this world-changing experience.

2. It reversed the image (of the Soviet Union) (as a backwater) and placed the country (on an international footing) (near to that) (of the United States).
   It reversed the image and placed the country.
   This thought is incomplete; only with the inclusion of the prepositional phrases do we know what the image of the Soviet Union had been and how it changed.

3. It also established spaceflight (as evidence) (of progress and forward thinking) (among the nations) (of the world).
   [Sentence imitations will vary.]

**Activity Two:**
1. to devote, to the quest
   In the first phrase, “to” is followed by a verb (“devote”); in the second phrase, “to” is followed by a noun (“quest”).
   Prepositional phrase: to the quest
   Infinitive phrase: to devote
   A prepositional phrase consists of “to” + a noun or pronoun and its modifiers; an infinitive phrase consists of “to” + a verb and its modifiers.
   It inspired him, and many (like him), [to devote their lives] (to the quest) (for space).
   [Sentence imitations will vary.]

2. Answers to the first question will vary. To obtain maximum benefit, ask students to go beyond the expected responses.
   prepositional phrases: across the narrow star field; between the ridgelines; of his home; in Coalwood, West Virginia
   Without the participial phrase, the sentence would simply say, “He watched ‘the bright little ball.’” The reader would not know where Hickam saw the ball or how the ball moved (or even that it did move). The reader would also miss the juxtaposition of the bright object in the sky and the rather plain setting from which Hickam watched this fascinating sight.

3. (From the tentative first steps) (into space) (with satellites and suborbital astronaut flights) (through the breathtaking orbital missions) (of Mercury, Gemini, and Apollo), the 1960s offered a vicarious thrill ride igniting the imagination (of millions).

<table>
<thead>
<tr>
<th>subject</th>
<th>verb</th>
<th>direct object with modifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>the 1960s</td>
<td>offered</td>
<td>a vicarious thrill ride igniting the imagination (of millions)</td>
</tr>
</tbody>
</table>

participial phrase: igniting the imagination of millions
This phrase modifies “ride.”
[Sentence imitations will vary.]
Challenge Activity:

1. 

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb</th>
<th>Direct Object with Modifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>they</td>
<td>saw</td>
<td>prospects of a bright, limitless future</td>
</tr>
</tbody>
</table>

one-word participles: confining, overcrowded, resource-depleted

2. raised on visions of human colonies on the moon and Mars (modifies “they”) 
   plying galactic oceans (modifies “starships”) 
   brought to the public by the likes of media magnate Walt Disney and German rocketeer Wernher von Braun (modifies “visions”)

3. Answers will vary, but students should see that the sentence with the participial phrases is more effective than four separate sentences.

4. Answers will vary.

5. Answers will vary.
Putting It All Together
“It All Started with Sputnik”
High School Foundation Lesson

Pre-Reading Questions

1. What is a satellite? Describe or draw your image of a typical man-made satellite orbiting earth today.

2. What does the name “Sputnik” suggest to you? List below any facts or details you know about Sputnik 1. If you don’t know anything about Sputnik 1, consult an encyclopedia and write a short summary of the information you find.

3. As you watch the video clip about Sputnik, jot down words that describe the reactions of people who are watching or reacting to this scientific accomplishment.

4. Write one or two sentences summarizing the impact Sputnik seems to have on the people in the video.

5. Why do you think Americans today are less impressed with sightings of satellites and other spacecraft than Americans in the 1950s were?

6. Following is an excerpt from an article called “It All Started with Sputnik” by Roger D. Launius. Based on the title, what would you expect this article to be about?
7. What prior knowledge do you bring to this article? ________________________________

___________________________________________________________________________

8. The article you are about to read is an informational text; it is nonfiction, not fiction. What does this mean? ________________________________

___________________________________________________________________________

Suggestions for reading an informational text:
Since this is not a narrative (story with a plot), you may need to read it more slowly than you would read a piece of fiction.
As you read, pay attention to:
- the organization of the article (paragraphs as well as sentences within paragraphs)
- facts and opinions in the article
- details that support opinions or illustrate facts
Determine the author’s purpose and his/her intended audience.

Reading the Article: Vocabulary
Read the excerpt carefully. As you read, determine the meanings of the following words, either by looking them up in a dictionary or using context clues. Circle the words as you encounter them and write a brief definition in the margin of the text.

eminent  
trajectory  
cosmos  
elusiveness  
adversary  
momentous  
galactic

magnate  
visionary  
quest  
rapt  
inexorable  
lexicon  
tentative

suborbital  
orbital  
vicarious  
surrogate  
audacity

Focused Reading
In his 1962 speech at Rice University, President John F. Kennedy said this about the space program:

The exploration of space will go ahead, whether we join it or not, and it is one of the great adventures of all time, and no nation which expects to be the leader of other nations can expect to stay behind in the race for space.

The following article provides an overview of the early days of the U.S. space program and its effect on Americans at that time. Pay careful attention to the writer’s use of diction and details that reveal his attitude toward the space program. Recently the U.S. space shuttle flew its final mission, and the future of this country’s manned space program is somewhat uncertain. As you read this article, keep in mind President Kennedy’s remarks and their implications (if any) for where the space program should go in the future.

Reading the Article: Summarizing
As you read the excerpt, write a brief summary of each paragraph on the lines provided for you.
It All Started with Sputnik

An eminent space historian looks back on the first 50 years of space exploration.

- By Roger D. Launius
- *Air & Space Magazine*, July 01, 2007

With the launch of a basketball-size satellite on October 4, 1957, the Soviet Union ushered in the “Space Age” and changed the world. Sputnik 1, launched from the Soviet Union’s rocket test site near Tyuratam, Kazakhstan, was a mere 184-pound “hunk of iron almost anybody could launch,” as a U.S. Navy admiral characterized it, but it carried on its orbital trajectory a symbolism far beyond its size. It was a first step beyond this planet, and we have never known a time since when there has not been some human-made object in Earth orbit. It reversed the image of the Soviet Union as a backwater and placed the country on an international footing near to that of the United States. It also established spaceflight as evidence of progress and forward thinking among the nations of the world. Finally, it suggested to many that the destiny of humanity rested in the cosmos rather than on Earth. Belief in that destiny, for all its elusiveness, has motivated tens of thousands of people over the last 50 years to invent the machines and instruments and chart the course for planetary exploration and, perhaps, migration.

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In the United States the Space Age dawned with a mixture of excitement and worry. Scientists and engineers congratulated their Soviet counterparts, but political and cultural leaders called attention to the menacing significance of the achievement. After all, if this adversary could launch a satellite over our heads, it could also bring a nuclear weapon down on us. Sputnik signaled a perceived inferiority of American technological know-how, and fear prompted all manner of actions deemed necessary to “catch up” to the Soviet Union in space. The creation of the National Aeronautics and Space Administration was one. Another was the National Defense Education Act of 1958, which appropriated millions for in science and mathematics education at all levels, from the elementary school to postgraduate. A generation of students benefited as educational programs nationwide received this infusion of new federal funding, an investment in education second only to the G.I. Bill after World War II, until the creation of the Department of Education in 1979.

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The generation of Americans who were in school during that momentous shift in priorities embraced space travel as a symbol of progress. Raised on visions of human colonies on the moon and Mars, and great starships plying galactic oceans—brought to the public by the likes of media magnate Walt Disney and German rocketeer Wernher von Braun—they saw prospects of a bright, limitless future beyond a confining, overcrowded, and resource-depleted Earth. One of the visionaries thrilled by Sputnik was 14-year-old Homer Hickam, who grew up to be a NASA engineer and author of the memoir *Rocket Boys* (which began as a short piece in *Air & Space/Smithsonian* magazine and was later adapted for the 1999 feature film *October Sky*). He watched “the bright little ball, moving majestically across the narrow star field between the ridgelines” of his home in Coalwood, West Virginia. It inspired him, and many like him, to devote their lives to the quest for space. Hickam recalled seeing it in the nighttime sky over his West Virginia home. “I stared at it with no less rapt attention than if it had been God Himself in a golden chariot riding overhead. It soared with what seemed to me inexorable and dangerous purpose, as if there were no power in the universe that could stop it.” Reflecting later that night on Sputnik, Homer Hickam decided that he wanted to be a part of what he considered a noble dream of space exploration.

The first 15 years of the Space Age proved to be some of the most exciting of my lifetime—though I was probably four or five years old before I realized that rockets were not supposed to explode during launch. From the repeated failures of those early launch vehicles, we learned that spaceflight was not going to be easy; perhaps that is why the term “rocket science” entered our lexicon as a measure of difficulty. But the pace of discovery in the early years was also dizzying. On January 31, 1958, just four months after Sputnik 1 caused a sensation, the United States launched its first Earth satellite—Explorer—which documented the existence of what became known as the Van Allen Belts, rings of charged particles encircling Earth. The following year, Pioneer 4 sailed past the moon (after four of the aforementioned launch failures) and a Russian Luna probe crashed into it (on purpose). From the tentative first steps into space with satellites and suborbital astronaut flights through the breathtaking orbital missions of Mercury, Gemini, and Apollo, the 1960s offered a vicarious thrill ride igniting the imagination of millions. As a 15-year-old, I sat with friends on the hood of a car on the night of July 20, 1969, looking at the moon and listening to the Apollo 11 astronauts on it. I understood the feeling expressed by novelist Ray Bradbury, who captured the emotion of that early heroic era of spaceflight when he commented: “Too many of us have lost the passion and emotion of remarkable things… Let us
not tear up the future, but rather again heed the creative metaphors that render space travel a religious experience. When the blast of a rocket launch slams you against the wall and all the rust is shaken off your body, you will hear the great shout of the universe and the joyful crying of people who have been changed by what they’ve seen.”

The moon landings changed us. Certainly the Apollo program was one side of a political contest, a surrogate for war. But it also stretched our imaginations and made us believe that anything we set our minds to we could accomplish. “Yes, indeed, we are the lucky generation,” commented CBS television news anchor Walter Cronkite, for we “first broke our earthly bonds and ventured into space. From our descendants’ perches on other planets or distant space cities, they will look back at our achievement with wonder at our courage and audacity and with appreciation at our accomplishments, which assured the future in which they live.”

Close Reading Questions—Remember, Understand
1. According to Launius, what three important concepts did the launch of Sputnik establish?

2. Why did American political and cultural leaders respond differently to Sputnik than did scientists and engineers?

3. Which mythological character is suggested by Homer Hickam’s description of “God Himself in a golden chariot riding overhead”? How did this image inspire Hickam?
4. What was the writer’s own first introduction to the Space Age? ____________________________

5. What does Launius mean when he says that “the pace of discovery in the early years was also dizzying”? ____________________________

6. Examine the names chosen for America’s early satellites and space craft—Explorer, Pioneer, Mercury, Gemini, Apollo. What do these names suggest about the American vision for man’s ventures into space? ____________________________

7. How does Launius say the moon landings changed Americans? ____________________________

    What evidence of this do you see in the Sputnik newsreel footage? ____________________________

Close Reading—Remember, Understand, Analyze

1. Read again the first sentence in the first paragraph and the first sentence in the second paragraph, noting the underlined verbs in each sentence:
   “With the launch of a basketball-size satellite on October 4, 1957, the Soviet Union ushered in the ‘Space Age’ and changed the world.”
   “In the United States the Space Age dawned with a mixture of excitement and worry.”
   What do these three verbs suggest about the significance of the events that began with the launch of Sputnik? ____________________________

2. The first sentence in paragraph 2 contains a paradox:
   “In the United States the Space Age dawned with a mixture of excitement and worry.”
   What contrasting emotions are identified here? ____________________________
   Why are these two emotions not mutually exclusive? ____________________________
3. This paradoxical statement serves as a transition between paragraph 1 and paragraph 2. List words from paragraph 1 that suggest or relate to the excitement that accompanied the launch of Sputnik.

________________________________________________________________________

Now list words from paragraph 2 that suggest that Sputnik also created a sense of apprehension.

________________________________________________________________________

4. The first sentence in the third paragraph begins with the phrase “The generation of Americans who were in school...” How is the writer’s focus on the reaction of young people—including Homer Hickam—more personal than the topic of paragraph 2?

________________________________________________________________________

5. Launius says that these young people were “raised on visions...” What does the word “vision” mean in this context?

________________________________________________________________________

Where in this paragraph does he use another form of the word “vision”?

________________________________________________________________________

Find another word in the paragraph that has a denotation similar to “vision.” Write the phrase in which this word appears:

________________________________________________________________________

6. Now find other nouns and verbs in this paragraph that seem connected to the word “vision.” Write them here:

________________________________________________________________________

How would you describe the tone created by this pattern of diction?

________________________________________________________________________

7. Paragraph 4 begins with this statement: “The first 15 years of the Space Age proved to be some of the most exciting of my lifetime...” Find other words in this paragraph with denotations or connotations similar to “exciting”? Write them here:

________________________________________________________________________

How would you describe the tone created by this pattern of diction?

________________________________________________________________________

8. What shift in the narration is signaled by Launius’ use of the pronoun “my” in paragraph 4? What other first person pronouns does he use in this paragraph?

________________________________________________________________________

9. Why do you think Launius includes in this paragraph his memory of the Apollo 11 mission?

________________________________________________________________________
**Figurative language** is a word or phrase that departs from everyday literal language for the sake of comparison, emphasis, clarity, or freshness. Two of the most common types of figurative language are metaphor (a direct comparison of two unlike things) and simile (a comparison of two unlike things using “like” or “as”). Other types of figurative language include:

- **hyperbole**—deliberate exaggeration for effect
- **oxymoron**—a form of paradox that combines a pair of opposite terms into a single unusual expression
- **paradox**—an intentionally contradictory statement that actually states a truth
- **personification**—a kind of metaphor that gives inanimate objects or abstract ideas human characteristics

10. Read again the quote from Ray Bradbury, the noted writer of science fiction novels and short stories. Label each of the following phrases in the Bradbury quote as **literal** or **figurative**. If a phrase is **figurative**, explain what is being compared or expressed in imaginative terms.

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Type</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“the blast of a rocket launch slams you against the wall”</td>
<td>figurative</td>
<td>Comparison of a rocket blast to sudden force</td>
</tr>
<tr>
<td>“all the rust is shaken off your body”</td>
<td>literal</td>
<td>Action of removing rust</td>
</tr>
<tr>
<td>“the great shout of the universe”</td>
<td>figurative</td>
<td>Imagery of universe’s powerful sound</td>
</tr>
<tr>
<td>“the joyful crying of people”</td>
<td>figurative</td>
<td>Description of people’s emotions</td>
</tr>
<tr>
<td>“changed by what they’ve seen”</td>
<td>literal</td>
<td>Action of change</td>
</tr>
</tbody>
</table>

What two words could you use to describe Bradbury’s attitude toward spaceflight?

11. Which two of the phrases above most clearly reveal Bradbury’s attitude? 

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Type</th>
<th>Reason</th>
</tr>
</thead>
</table>

Explain why you selected these two: 

12. What two words could you use to describe the writer’s overall **tone** in paragraph 4? ____

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13. Read carefully the final paragraph of this excerpt. List words from this paragraph that have similar denotations and/or connotations: __________________________________________

What two words could you use to describe the tone of the final paragraph in the excerpt?

14. Read again your summaries of the five paragraphs in this article, and think about the main idea of each paragraph.

The first paragraph of the article describes the consequences of the Sputnik launch for the world and especially for the Soviet Union.

Write one complete sentence that states the main idea of the second paragraph. ______________

The third paragraph becomes more personal, describing the effects of Sputnik on __________

The fourth paragraph becomes even more personal, describing the effects of Sputnik on ____

Write one complete sentence that states the main idea of the final paragraph in the excerpt. __

15. Write one complete sentence that describes the organizational pattern of the paragraphs in this excerpt: __________________________________________

Why do you think the writer organized the article in this way? __________________________

16. The subhead on the article describes Roger Launius as “an eminent historian.” He served as chief historian for NASA (National Aeronautics and Space Administration) from 1990 until 2002. Does this information make him more or less credible on this subject? ______________

Why? __________________________
When we read an informational text, we should pay attention to whether the author relies primarily on facts or opinions to achieve his purpose. Read the excerpt again. In the margin, place a check mark (✓) beside each factual statement and an asterisk (*) beside each opinion. Are there more factual statements or opinions, or are there about the same number of each?

17. Based on your answers to the previous questions, complete the following statement: Roger Launius’ primary purpose in the article “It All Began with Sputnik” is to ________________

Grammar: Adding Meaning through Phrases
Levels of Thinking: Remember, Understand, Apply, Analyze, Evaluate, Create

Simple Sentences

Simple sentences consist of a subject noun or pronoun, a verb, and its complements. Even though a simple sentence expresses a complete thought, writers often included additional phrases—groups of words that function as a single part of speech—to add meaning and clarity for the reader. However, even with the addition of phrases, the sentence remains a simple sentence with only one independent clause. Simple sentences can be very short or very long depending on the number of phrases and modifiers the writer uses.

Both of the sentences below are examples of simple sentences.

Men fall.

Frightening pedestrians in their path, the men fall, twisting and tumbling with great speed down the concrete sidewalk toward the street filled with speeding cars and trucks.

Activity One: Prepositional Phrases

A prepositional phrase consists of a preposition plus its object and modifiers. Common prepositions include to, around, under, over, like, as, behind, with, outside, etc. Prepositional phrases may function as adjectives or as adverbs.

1. Read again the first sentence in the first paragraph of the excerpt:

   With the launch of a basketball-size satellite on October 4, 1957, the Soviet Union ushered in the “Space Age” and changed the world.

   The sentence begins with three prepositional phrases. Write them here:

   __________________________________________________________________________

   This is a simple sentence with a compound verb. Write the independent clause here; then underline the subject of the sentence once and the two verbs twice.

   __________________________________________________________________________

   How do the prepositional phrases at the beginning of the sentence add meaning and make the sentence more interesting? __________________________________________________________________________
2. Now read this sentence, which is also a simple sentence from the first paragraph:

“It reversed the image of the Soviet Union as a backwater and placed the country on an international footing near to that of the United States.”

Put parentheses around each prepositional phrase in this sentence. In the space below, write what is left when you remove the prepositional phrases from this sentence:

_________________________________________________________________

Underline the subject of this sentence once and the verb(s) twice.

How do the prepositional phrases add meaning in this sentence? ____________________________________________________________________________________________

_________________________________________________________________

3. Read this sentence, another simple sentence from the first paragraph. Put parentheses around each prepositional phrase. Then underline the subject once and the verb twice.

“It also established spaceflight as evidence of progress and forward thinking among the nations of the world.”

Now write an original sentence that imitates the structure of this sentence.

_________________________________________________________________

Underline the subject of your sentence once and the verb twice. Put parentheses around each prepositional phrase in your sentence. Do you have the same number of prepositional phrases as the sentence from the excerpt? ____________________________________________________________________________________________

Activity Two: Other Types of Phrases

Infinitive Phrases

An infinitive phrase consists of the word “to” plus a verb and any of its complements. Infinitives can function as adjectives, adverbs, or nouns.

1. Read the following sentence from the excerpt:

“It inspired him, and many like him, to devote their lives to the quest for space.”

The word “to” is often a preposition, used at the beginning of a prepositional phrase. But “to” can also be used at the beginning of another type of phrase, an infinitive phrase. There are two phrases beginning with “to” in this sentence. Write them here:

_________________________________________________________________

How are the words following “to” different in these phrases? ____________________________________________________________________________________________

_________________________________________________________________

Which of these phrases is a prepositional phrase? ____________________________________________________________________________________________
Which one is an infinitive phrase? ____________________________________________________________________________________________
How do you know? ____________________________________________________________________________________________

_________________________________________________________________

Put parentheses ( ) around each prepositional phrase in the sentence and put brackets [ ] around the infinitive phrase. Then underline the subject once and the verb twice.
Now write an original sentence imitating the structure of this sentence.

________________________________________________________________________________________

Underline the subject of your sentence once and the verb twice. Put parentheses ( ) around each prepositional phrase in your sentence and put brackets [ ] around the infinitive phrase. Does the structure of your sentence match the structure of the sentence from the excerpt?

Participial Phrases

Participles are verb forms (especially ending in –ed or –ing) which function as adjectives. The participle, along with any modifiers, is called a participle phrase. Participles and participial phrases may come before or after the noun or pronoun they modify, but they should be in close proximity to avoid confusion on the part of the reader.

2. Read the following sentence.

   He watched “the bright little ball, moving majestically across the narrow star field between the ridgelines” of his home in Coalwood, West Virginia.

   The independent clause in this sentence can be charted like this:

<table>
<thead>
<tr>
<th>subject</th>
<th>verb</th>
<th>direct object with modifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>He</td>
<td>watched</td>
<td>the bright little ball</td>
</tr>
</tbody>
</table>

   How interesting would this sentence be if these words made up the whole sentence? Why?

________________________________________________________________________________________

The rest of the words in the sentence describe “the bright little ball” and make up a participial phrase beginning with the participle “moving.” The adverb “majestically” tells how the ball was “moving.” Notice that there are also prepositional phrases that modify “moving” and are therefore part of the participial phrase. List those prepositional phrases here:

________________________________________________________________________________________

How does the participial phrase (moving majestically across the narrow star field between the ridgelines of his home in Coalwood, West Virginia) add meaning and interest to this sentence?

________________________________________________________________________________________

3. Read the following sentence and put parentheses around the prepositional phrases:

   From the tentative first steps into space with satellites and suborbital astronaut flights through the breathtaking orbital missions of Mercury, Gemini, and Apollo, the 1960s offered a vicarious thrill ride igniting the imagination of millions.
Find the independent clause in this sentence and write the words in the appropriate boxes in the chart below:

<table>
<thead>
<tr>
<th>subject</th>
<th>verb</th>
<th>direct object with modifiers</th>
</tr>
</thead>
</table>

Write the words that make up the participial phrase here: 

What word is modified by the participial phrase? 

Now write an original sentence imitating the structure of this sentence.

Find the independent clause in your sentence and write the words in the appropriate boxes in the chart below:

<table>
<thead>
<tr>
<th>subject</th>
<th>verb</th>
<th>direct object with modifiers</th>
</tr>
</thead>
</table>

Write the words that make up the participial phrase in your sentence here:

What word is modified by your participial phrase?

**Challenge Activity**
1. Read the following sentence from the excerpt:

   *Raised on visions of human colonies on the moon and Mars, and great starships plying galactic oceans—brought to the public by the likes of media magnate Walt Disney and German rocketeer Wernher von Braun—they saw prospects of a bright, limitless future beyond a confining, overcrowded, and resource-depleted Earth.*

   Chart the independent clause in this sentence:

<table>
<thead>
<tr>
<th>subject</th>
<th>verb</th>
<th>direct object with modifiers</th>
</tr>
</thead>
</table>

   Some sentences include **one-word participles** (ed or ing verb forms) that do not have modifiers. This sentence includes three of these participles, all modifying “Earth.” List these three participles here:
2. List below the participial phrases in this sentence and tell what each one modifies. (Hint: There are three participial phrases in this sentence)

<table>
<thead>
<tr>
<th>participial phrase</th>
<th>noun/pronoun modified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Participial phrases enable writers to pack more meaning into a single sentence instead of writing a separate sentence for each idea. If we wrote a sentence for each idea included in this sentence, we would have something like this:

   (1) They were raised on visions of human colonies on the moon and Mars and great starships.
   (2) The starships were plying galactic oceans.
   (3) The visions were brought to the public by the likes of media magnate Walt Disney and German rocketeer Wernher von Braun.
   (4) They saw prospects of a bright, limitless future beyond a confining, overcrowded, and resource-depleted Earth.

   Which is more effective—the single sentence from the excerpt or the four sentences above?

   Why? ____________________________________________________________

4. Using what you learned above, change two of these sentences into participial phrases and then combine the three sentences into one:

   As a 15-year-old, I sat with friends on the hood of a car on the night of July 20, 1969.
   We were looking at the moon.
   We were listening to the Apollo 11 astronauts on it.

   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

5. Now write an original sentence that imitates the structure of the sentence you just created.

   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

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Writing Assignments—Remember, Understand, Analyze, Evaluate, Create

1. Describe a time in your life when you witnessed a significant historical event. Include details about the event itself and the impact the event had on you as a person.

2. According to the article, a U.S. Navy admiral characterized Sputnik as “a mere 184-pound ‘hunk of iron almost anybody could launch,’” but to Homer Hickam it was a “‘bright little ball, moving majestically across the narrow star field between the ridgelines’ of his home in Coalwood, West Virginia.” Write one or two paragraphs in which you explain why these two people described Sputnik in such strikingly different terms.

3. Read again the words of Ray Bradbury, the noted writer of science fiction stories and novels: “Too many of us have lost the passion and emotion of remarkable things. . . . Let us not tear up the future, but rather again heed the creative metaphors that render space travel a religious experience. When the blast of a rocket launch slams you against the wall and all the rust is shaken off your body, you will hear the great shout of the universe and the joyful crying of people who have been changed by what they’ve seen.” Write a brief essay in which you challenge or defend Bradbury’s statement that many Americans “have lost the passion and emotion of remarkable things.” Defend your position with your own observations as well as with information from your reading and/or news events.