WR.3 NARRATIVE

Lesson 5 Reading Sources

Introduction

In this lesson, students finish reading and analyzing the article "The Flight of Apollo 11" by Kenneth F. Weaver (from "Dr. Gary V. Latham of Columbia University's Lamont-Doherty Geological Observatory" to "What is man, that thou art mindful of him?"). In this final portion of the article, the author describes some of the scientific accomplishments on Apollo 11 and reflects on the meaning of the mission as well as the future of space travel. Students are also introduced to audio and video sources to assist them in gathering material for their own narrative drafts. Student learning is assessed via a Quick Write at the end of the lesson: Write a brief description of the moment in the photograph from the perspective of one of the people in the picture, or the person taking the picture. Choose at least three different senses about which to include details (e.g., what being there sounded like, looked like, felt like).

For homework, students listen to the audio and watch the video resources, recording lines of dialogue and other details in their notes or on their charts for use in their own narratives. Students also reread the narrative writing prompt from the WR.3 Lesson 3 Prompt Analysis Exit Slip and decide which character's perspective they will take in their own narrative.

Standards

Assessed Standard(s)				
W.9-10.5	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.			
Addressed Standard(s)				
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research.			
	b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").			



Assessment

Assessment(s)

Student learning is assessed via a Quick Write at the end of the lesson. Students respond to the following prompt, using sensory details to complete their responses.

• Write a brief description of the moment in the photograph from the perspective of one of the people in the picture, or the person taking the picture. Choose at least three different senses about which to include details (e.g., what being there sounded like, looked like, felt like).

High Performance Response(s)

A High Performance Response should:

- Establish a perspective in relation to the photograph (e.g., As I walked down the ladder from the module, I was surprised by how light my suit felt in the moon's gravity.).
- Use at least three sensory details to describe the scene (e.g., I could already see through the glass on my helmet that the light was unlike any I had seen on Earth—it was pure brilliant white on the surface of the moon. Everything I touched was separated by layers of material, so everything felt like it was coated in rubber. The air in my helmet smelled like a hospital, just a little cleaner than regular air. In my headset I heard the crackle of Mission Control and then Neil say, "Isn't it fun?" when I got off the ladder. But I knew outside of my helmet was complete silence.).

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- meteorite (n.) a piece of rock or metal that has fallen to the ground from outer space
- obscured (v.) made dark, dim, indistinct, etc.
- fused (adj.) combined or blended by melting together; melted
- apprehension (n.) anticipation of adversity or misfortune; suspicion or fear of future trouble or evil
- memento (n.) something that is kept as a reminder of a person, place, or thing
- quarantine (n.) the situation of being kept away from others to prevent a disease from spreading
- hyperbole (n.) obvious and intentional exaggeration
- insatiable (adj.) always wanting more; not able to be satisfied

Vocabulary to teach (may include direct word work and/or questions)

None.





Additional vocabulary to support English Language Learners (to provide directly)

- quake (n.) a violent shake, as in an earthquake
- accomplishment (n.) the successful completion of something

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: W.9-10.5, W.9-10.9.b	
Text: "The Flight of Apollo 11" by Kenneth F. Weaver	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability	2. 20%
3. Reading and Discussion	3. 50%
4. Quick Write	4. 10%
5. Closing	5. 15%

Materials

- Student copies of the Settings, Characters, and Events Chart (refer to WR.3 Lesson 3) (optional) students may need additional blank copies
- Student copies of the Lunar Landing Images Handout (refer to WR.3 Lesson 4)
- Student copies of the Sensory Writing Rubric and Checklist (refer to WR.3 Lesson 4)
- Student copies of their WR.3 Lesson 3 Prompt Analysis Exit Slips (refer to WR.3 Lesson 3)

Learning Sequence

How to Use the Learning Sequence			
Symbol	Type of Text & Interpretation of the Symbol		
10%	Percentage indicates the percentage of lesson time each activity should take.		
no	Plain text indicates teacher action.		
symbol	Bold text indicates questions for the teacher to ask students.		



	Italicized text indicates a vocabulary word.	
•	Indicates student action(s).	
•	Indicates possible student response(s) to teacher questions.	
(i)	Indicates instructional notes for the teacher.	

Activity 1: Introduction of Lesson Agenda

5%

Begin by reviewing the agenda. In this lesson, students finish reading and analyzing "The Flight of Apollo 11," continuing to gather details about the settings, characters, and events. In closing, students are introduced to audio and video sources to assist them in gathering material for their own narrative drafts.

▶ Students look at the agenda.

Activity 2: Homework Accountability

20%

Instruct students to take out their responses to the previous lesson's homework assignment. (Read and annotate sections 4–9 of "The Flight of Apollo 11" by Kenneth F. Weaver. In addition, answer the following questions based on the reading.)

Post or project the following questions from the previous lesson's homework assignment for students to reference. Instruct students to form pairs or small groups to discuss their responses.

What new information does the reader gain from the description of the space suits? What do these descriptions suggest about the mission?

- Student responses may include:
 - The author describes how long it took for the astronauts to put on the space suits. They were "many-layered" and made of extremely expensive and strong material (sec. 4, par. 2). The author's description of the space suits shows how harsh and dangerous the lunar environment was for the men. This sense of danger increases the tension of the lunar walk.
 - The author's detailed description also highlights how much work and expense went into the mission: for example, their gloves were "covered with fine metal mesh (a special alloy of chromium and nickel)—worth \$1000 a yard" (sec. 4, par. 2). These details emphasize how important the mission is because so much work and money went into everything from their gloves to their helmets and visors "both of [which were] coated in gold" (sec. 4, par. 2).
 - The author also describes how the suits added "190 pounds" (sec. 4, par. 4) to each man's weight on earth, which gives a sense of how bulky and difficult the suits were to move in.

These details help to create a picture in the reader's mind of what the astronauts looked like and how they moved.

What perspective does the author use to describe the first step on the moon (sec. 5, par. 2)? How does the author's choice of perspective create interest or suspense in the narrative?

The author chooses to describe the moon landing from the perspective of someone watching on TV as the "ghostly foot" stepped "tentatively" onto the moon (sec. 5, par. 2). This perspective shows how exciting it was to witness the first step for those watching it live on television.

How does the author describe how the astronauts move around on the moon? What overall impression do these descriptions create of how the astronauts move?

- Student responses may include:
 - The author writes that they seemed "like colts" (sec. 6, par. 3), which conveys how nervous and jerkily they moved at times. Which is confirmed by an astronaut back on Earth who described them as looking like a "pair of Texas jack rabbits" (sec. 6, par. 3), which move quickly but unpredictably.
 - Then the author compares the astronauts to "dancing bears" or "marionettes" (sec. 6, par.
 4), which suggests that they sometimes moved slowly and with difficulty.
 - However, the author also states that sometimes the astronauts' movements were like a "ballet" (sec. 6, par. 4), which indicates that they also moved gracefully at times.
 - These similes together convey to the reader how strange the astronauts looked as they
 moved on the moon. Sometimes they moved quickly and jerkily, other times slowly and
 even gracefully. These descriptions show how new and difficult it was for the astronauts to
 move on the moon.

Lead a brief whole-class discussion of student responses.

① Differentiation Consideration: Students may use their Settings, Characters, and Events Chart to record the significant settings, characters, and events they identified and discussed.

Activity 3: Reading and Discussion

50%

① The following activity addresses the expectations of W.9-10.9.b.

Instruct students to remain in their pairs or small groups from the previous activity. Post or project each set of questions below for students to discuss. Instruct students to annotate the article and/or use their charts to record details about the settings, characters, events, and other important details as they discuss each question.

① **Differentiation Consideration:** If necessary to support comprehension and fluency, consider using a masterful reading of the focus excerpt for the lesson.

Instruct student pairs or groups to read sections 10–12 of "The Flight of Apollo 11" (from "Dr. Gary V. Latham of Columbia University's Lamont-Doherty Geological Observatory" to "four beats faster than it had been during the lunar landing") and answer the following questions before sharing out with the class.

Provide students with the following definitions: *meteorite* means "a piece of rock or metal that has fallen to the ground from outer space," *obscured* means "made dark, dim, indistinct, etc.," and *fused* means "combined or blended by melting together; melted."

- ① Students may be familiar with these words. Consider asking students to volunteer definitions before providing them to the class.
 - ▶ Students write the definitions of *meteorite, obscured,* and *fused* on their copies of the text or in the appropriate section of their vocabulary journals.
- **① Differentiation Consideration:** Consider providing students with the following definition: *quake* means "a violent shake, as in an earthquake."
 - ▶ Students write the definition of *quake* on their copies of the text or in the appropriate section of their vocabulary journals.

What are the uses of the seismometers discussed in section 11? Did they work properly?

- Student responses may include:
 - The seismometers can "record tremors about one million times smaller than the vibration level that a human being can feel" (sec. 10, par. 5). The scientists hoped the instruments would help them to understand the moon's interior just as the same devices did on earth.
 - On the one hand, the seismometers worked properly, because they "began recording the footfalls of the astronauts on the moon" (sec. 10, par. 9). Then after the astronauts left the moon, the seismometers recorded what "may be landslides, perhaps in West Crater" (sec. 11, par. 3).
 - However, on the other hand, the seismometers seemed to only have recorded those landslides before "their command receiver gave out from overheating on the second noon" (sec. 11, par. 5). Therefore, the seismometers did not work very long or record very many lunar vibrations.

What do scientists hope to learn using the reflector set up on the moon?

■ The scientists will beam a laser up to the moon and measure the distance precisely based on how long it takes for the light to travel back. Among other things, this will help scientists



discover whether the Earth's continents are moving apart, based on the measurements from two different laser beams on different continents.

What details does the author give about the concerns Mission Control had while the scientists set up their equipment? How do these details develop the perspective of those at Mission Control while the astronauts were on the moon?

- Student responses should include:
 - The author describes how "the flight controllers in Houston were getting nervous that the two men would overstay their time" (sec. 12, par. 14) on the moon. Armstrong had traveled 200 feet away to photograph a crater and was "really puffing," or breathing heavily, when he returned to the ship (sec. 12, par. 15).
 - These descriptions show that even when the astronauts had landed safely and were working, Mission Control was still worried about their safety.
 - These descriptions also show that the astronauts were curious and wandered far away from the lunar module, despite Mission Control's concern.

Lead a brief whole-class discussion of student responses.

① Differentiation Consideration: Students may use their Settings, Characters, and Events Chart to record the significant settings, characters, and events they identified and discussed.

Instruct student pairs or groups to read sections 13–16 (from "But the controllers' fears were groundless" to "What is man, that thou art mindful of him?") and answer the following questions before sharing out with the class.

Provide students with the following definitions: *apprehension* means "anticipation of adversity or misfortune; suspicion or fear of future trouble or evil," *memento* means "something that is kept as a reminder of a person, place, or thing," *quarantine* means "the situation of being kept away from others to prevent a disease from spreading," *hyperbole* means "obvious and intentional exaggeration," and *insatiable* means "always wanting more; not able to be satisfied."

- ③ Students may be familiar with these words. Consider asking students to volunteer definitions before providing them to the class.
 - ▶ Students write the definitions of *apprehension, memento, quarantine, hyperbole,* and *insatiable* on their copies of the text or in the appropriate section of their vocabulary journals.
- ① **Differentiation Consideration:** Consider providing students with the following definition: *accomplishment means* "the successful completion of something."



▶ Students write the definition of *accomplishment* on their copies of the text or in the appropriate section of their vocabulary journals.

What were the physical states of the astronauts after their moonwalk? What does this information tell you about how the astronauts physically dealt with being on the moon?

Armstrong was not "particularly tired" (sec. 13, par. 1) and said he felt "nothing at all like the exhaustion after a football game" (sec. 13, par. 2). The astronauts still had half of their oxygen and "ample water and battery power" (sec. 13, par. 3). In fact, Armstrong and Aldrin were so healthy during their moonwalk that the astronauts of Apollo 12 were "given permission to stay substantially longer on the moon" (sec. 13, par. 3). In short, the Apollo 11 astronauts easily tolerated their time on the moon.

What does the author mean when he describes an "expensive museum" (sec. 14, par. 1) on the moon?

■ The author describes lunar instruments and other items, including an American flag, an "olive branch in gold" (sec. 14, par. 1), and many expensive things like cameras and backpacks that the astronauts had to leave behind on the moon. The author's descriptions develop the idea that future visitors to the moon will look at the expensive, important historical objects left there by the astronauts just as visitors to a museum look at priceless, important historical objects.

How does the author describe Armstrong and Aldrin's return to Collins' craft (sec. 14, par. 6)? What is the effect of these descriptions on the development of the astronauts as characters?

- Student responses may include:
 - O The author describes how "for a few moments during docking" the lunar module and Collins' craft could not come together, but the "skillful" pilots were able to solve the problem (sec. 14, par. 6). This detail initially creates tension in the scene, which is relieved because the astronauts are skillful pilots. This event further develops the heroism of the three men who performed great feats of skill and bravery in travelling to the moon.
 - Collins showed "undiluted joy" (sec. 14, par. 5) when he saw his fellow astronauts returning. The men shook hands once the two ships were docked. These details demonstrate how relieved the men were to nearly complete their mission, and how much Collins cared for his fellow astronauts, which develops the characters as kind and likeable men.

How does the author describe the journey back to earth? What is the effect of this description on the narrative?

The astronauts' return trip was "uneventful" and they had a "totally successful reentry" on returning to earth (sec. 14, par. 7). They were kept in quarantine out of fear they might have





harmful organisms on them, but after almost a month they were "released to their families and a waiting world" (sec. 14, par. 9). After the suspenseful description of the moon landing itself, the effect of this description on the narrative is to show that events were much calmer for the astronauts after they completed their mission on the moon, which shows that the moon landing was the climax of the narrative.

How does the author's word choice in the above description convey the importance of the Apollo mission?

■ The author writes that it was the "coming of age of the space program" (sec. 15, par. 2) and uses the word "triumph" twice: he describes a "technological triumph of the highest order (sec. 15, par. 4) and writes that it was also a "triumph of the human spirit" (sec. 16, par. 1). The author describes the Apollo 11 mission as one of the most important events in history, giving the reader a sense of awe at the accomplishment.

Lead a brief whole-class discussion of student responses.

① Differentiation Consideration: Students may use their Settings, Characters, and Events Chart to record the significant settings, characters, and events they identified and discussed.

Activity 4: Quick Write

10%

Instruct students to take out their Lunar Landing Images Handouts or display the photos for all to see. Instruct students to select one photograph and write a sensory description, do as they did in the previous lesson (Lesson 4). This photograph should be different from the one they chose in the previous lesson.

Instruct students to identify an aspect of their response from the previous lesson that they think is particularly strong, for example, describing a particular sense in an interesting way, or finding a way to describe all five senses. Instruct students to consider this strength while writing during this lesson to continue to build upon their strong work.

Instruct students to draw on what they read in this lesson to respond briefly in writing to the following prompt:

Write a brief description of the moment in the photograph from the perspective of one of the people in the picture, or the person taking the picture. Choose at least three different senses about which to include details (e.g., what being there sounded like, looked like, felt like).

① Differentiation Consideration: Consider providing the following questions to guide students in their sensory writing:



What would the person in the picture see when he or she looked around?

What noises would the objects in the room make (e.g., telephones, computers, vehicles)?

What smells are associated with settings like the one in the picture (e.g., the ocean)?

What would the objects near the person feel like to the person?

What might have happened just before or after the picture was taken (e.g., did the person in the picture eat or drink something or talk to another person)?

Remind students to use the Sensory Writing Rubric and Checklist to guide their written responses.

- Students listen and read the Quick Write prompt.
- ① Display the prompt for students to see, or provide the prompt in hard copy.

Transition to the independent Quick Write.

- Students independently answer the prompt using sensory details related to the image.
- See the High Performance Response at the beginning of this lesson.

Activity 5: Closing 15%

Explain that in addition to the photos and text, there are also audio and video sources on the Internet that provide material for their narratives. Play a sample of the audio from the lunar landing from the website http://www.firstmenonthemoon.com/, from 102:44:37 on the time bar (marked with the tab "low level fuel warning") until the tab on the time bar marked "The Eagle has Landed!" (102:45:49). Explain that the audio in this section corresponds to the description in the article "The Flight of Apollo 11" of the moment when the astronauts received a low fuel warning and had to land the module within 90 seconds or abort the mission.

i If possible, consider displaying the website and explaining how it is configured for students. The left column is the conversation between the astronauts and Mission Control. The right column is the conversation among the people at Mission Control. Each column has a transcription of what the people speaking are saying and the scrolling dialogue can be synced to the video of the landing in the middle. Students can use the columns on the left or right as well as the time bar at the bottom to navigate to different parts of the audio.

Provide students with the links for the audio and the video footage at:

http://www.firstmenonthemoon.com



and

http://www.nasa.gov/multimedia/hd/apollo11 hdpage.html#.VKwk23vxXm5

Display and distribute the homework assignment. For homework, instruct students to listen to the audio and/or watch the video, and record at least two important or interesting pieces of dialogue or action as well as why they think these examples are interesting.

Also for homework, instruct students to gather and read through their charts and annotations or notes on texts from this unit. Then instruct students to reread the narrative writing prompt from the WR.3 Lesson 3 Prompt Analysis Exit Slip and decide which character's perspective they will take in their own narrative.

Students follow along.

Homework

Listen to the audio and/or watch the video, and record at least two important or interesting pieces of dialogue or action as well as why you think these examples are interesting.

Also, gather and read through your charts and annotations or notes on texts from this unit. Then reread the narrative writing prompt from the WR.3 Lesson 3 Prompt Analysis Exit Slip and decide which character's perspective you will take in your own narrative.





Model Settings, Characters, and Events Chart

Name:	Class:	Date:	

Directions: Record the significant settings, characters, and events from each text in this chart. Include details (e.g., dialogue, description, etc.) that develop each of these elements. Cite textual evidence to support your work.

Text Title:	"The Flight of Apollo 11" (section 4–section 9)				
Settings	Characters	Events			
The Moon Various settings on earth	Armstrong says: "That's one small step for a man, one giant leap for mankind" when he steps onto the moon (sec. 5, par. 3). Aldrin sets up the lunar experiments.	Astronauts put on their suits: They were "many-layered" and made of extremely expensive and strong material (sec. 4, par. 2). The author's description of the space suits shows how harsh and dangerous the lunar environment was for the men.			
		The author describes the perspective of someone watching on TV as the "ghostly foot" stepped "tentatively" onto the moon (sec. 5, par. 2). This perspective shows how exciting it was to witness the first step for those watching it live on television.			
		The astronauts figure out how to move on the moon and the author compares the astronauts to "dancing bears" or "marionettes" (sec. 6, par. 4), which suggests that they sometimes moved slowly and with difficulty.			
		Some of the scientific experiments on the moon are described, including the collection of moon rocks and the setting up of a "seismometer" for			



Text Title:	"The Flight of Apollo 11" (section 4–section 9)			
Settings	Characters	Events		
		detecting vibrations on the moon as well as a super-mirror, which will "reflect laser beams sent up from earth" (sec. 9, par. 1).		
The moon	Armstrong states how he hopes that the	"Houston was getting nervous that		
Various places on earth	voyage is "the beginning of an era when man understands the universe around him and himself" (sec. 16, par. 2).	the two men would overstay their time" on the moon (sec. 12, par. 14). Armstrong had traveled 200 feet away to photograph a crater and was "really puffing," or breathing heavily,		
	Aldrin says that the mission stands as a "symbol of the insatiable curiosity of all mankind to explore the unknown" (sec. 16, par. 1).	when he returned to the ship (sec. 12, par. 15).		
	Collins shows "undiluted joy" (sec. 14, par. 5) when he saw his fellow astronauts returning.	The author describes how "for a few moments during docking" the lunar module and Collins' craft could not come together, but the "skillful" pilots were able to solve the problem (sec. 14, par. 6).		
	People at Mission Control get nervous and relieved based on astronauts' safety.	The astronauts' return trip was "uneventful" and they had a "totally successful reentry" on returning to Earth (sec. 14, par. 7). They were kept in quarantine out of fear they might have harmful organisms on them, but after almost a month they were "released to their families and a waiting world" (sec. 14, par. 9).		

