

ISSUF THEME

Curiosity can lead to greater understanding.

CONVERSATION QUESTION

How does curiosity influence what people do?

TEACHING OBJECTIVES

- Students will learn about the development of the first liquid-fueled rocket
- Students will analyze the structure of texts
- Students will analyze how individuals, events, and ideas develop and interact over the course of a text
- Students will recognize the genre and key elements and characteristics of literary texts
- Students will focus on the practice of science
- Students will engage in argument from evidence
- Students will analyze places, including their physical, cultural, and environmental characteristics
- Students will focus on the practice of science



In addition to supplemental materials focused on core English Language Arts skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and crosscurricular activities.

SELECTIONS

- The Flying Test
- Science Fiction, ~750L
- The Girl Who Lived with Robots

Science Fiction, ~750L

 Launching Rockets: The Story of Robert H. Goddard Biography, ~1150L

The Flying Test

pp. 5-9, Science Fiction

Use this story about a boy who worries he won't measure up to his successful father to teach students about conflict, climax, and resolution.



RESOURCES

Analyze Plot Worksheet

OBJECTIVES

- Students will read and analyze a science fiction story
- Students will analyze the structure of texts
- Students will engage in argument from evidence

KEY VOCABULARY

- famous (p. 5) known or recognized by very many people
- expedition (p. 5) a journey for a specific purpose
- Illustrious (p. 5) admired and respected very much because a lot was achieved
- deployed (p. 6) organized and sent out (people or things) for a particular purpose
- *legacy* (p. 5) something that comes from someone in the past
- legendary (p. 5) very famous or well known

ENGAGE

Conversation Question: How does curiosity influence what people do?

Explain that *curiosity* means "the desire to know more about someone or something." Share with students the name of a famous person you would like to know more about. Then invite students to share their own examples and explain why they are curious about these figures. Ask students how they think they might feel if they were face to face with these people. Explain that the boy in the next story feels curious and nervous about seeing his famous father again after a long separation.

INTRODUCE VOCABULARY

Display the vocabulary words and ask volunteers to explain the meanings of familiar words. Acknowledge correct meanings and then read the definitions aloud. Next, have students work in pairs to put the words into groups and make predictions about will happen in the story. Invite pairs to share their groups and predictions.

READ & DISCUSS

After all students have read the story independently, use the questions below to discuss it:

- 1. Why is Antrik nervous about seeing his father?
- 2. How is curiosity a part of this story?
- 3. Is Antrik a "chip off the old block"? Explain your answer.
- 4. Identify three details that show the story is set in the future and three details that could exist in the past, present, or future.

SKILL FOCUS: Analyze Plot

INSTRUCT: Display the words *conflict, climax,* and *resolution*. Then explain the following:

- The events in a story usually center around a **conflict** or problem that a character struggles with.
- The **climax** of a story is the turning point, when the main character makes an important discovery or decision.
- The **resolution**, or end, of the conflict usually takes place at the end of the story.

Use a familiar fairy tale, such as Cinderella, to teach students how to identify these plot elements.

ASSESS: Have students work in pairs to fill in the chart on the *Analyze Plot* worksheet using details from "The Flying Test."

EXTEND

Science Have students conduct a class-wide debate using the resolution "Space exploration is a waste of time and money." Assign students to the negative and affirmative sides and allow time for research. Then have students present their arguments.

The Flying Test

Analyze Plot Worksheet

Name_

- In the first box, describe the conflict in the story.
- In the second box, describe the climax in the story.
- In the third box, explain how the conflict is resolved.

The Girl Who Lived with Robots

pp. 11-17, Science Fiction

Use this story about a girl raised by robots who meets a girl raised by humans to help students compare characters.

Lexile Score: ~750L



RESOURCES

Comparing Characters Worksheet

OBJECTIVES

- Students will read and analyze a science fiction story
- Students will analyze how individuals, events, and ideas develop and interact over the course of a text
- Students will analyze places, including their physical, cultural, and environmental characteristics

KEY VOCABULARY

- monotone (p. 11) talking without raising or lowering the sound of your voice
- invigorated (p. 11) gave life and energy to someone
- gone haywire (p. 16) stopped working properly
- rhetorical (p. 16) asked to make a statement rather than to get an answer

ENGAGE

Conversation Question: How does curiosity influence what people do?

Ask students if they ever wonder about how people lived in different times or places. Use the following questions to prompt discussion: What was it like to live in our town 100 years ago? What will it be like to live in our town 100 years from today? How does curiosity help you learn about other people? Then tell students that the two girls in the next story are the same age but have led very different lives.

INTRODUCE VOCABULARY

Display the vocabulary words and read them aloud. Ask volunteers to explain the meanings of familiar words. Acknowledge correct meanings and then read the definitions aloud. Finally, have students work in pairs to make up sentences using these words. Invite students to share their sentences.

READ & DISCUSS

After students have read the story independently, use the questions below to discuss the story:

- 1. How does Diana feel about robots and about humans?
- 2. What do you think are the benefits and drawbacks of being raised by robots?
- 3. How is curiosity a part of this story?
- 4. What do you think will happen in the next part of the story?

SKILL FOCUS: Compare Characters

INSTRUCT: Tell students that they can analyze story characters by thinking about and comparing the characters' experiences and characteristics. Distribute a copy of the *Comparing Characters* worksheet to students and have students work in pairs to complete it. Bring the class together to share and discuss responses.

ASSESS: Display this prompt and have students write a short essay in response: Compare and contrast Diana and Li. How are the girls similar and different? Use the information in your *Comparing Characters* worksheet to support your ideas.

EXTEND

Social Studies Tell students that the United States includes many small and large islands. Point out that Maine, Washington, Florida, and Georgia are examples of states that have coastal islands. Have students conduct online and library research to find out what it's like to grow up on an island. Tell students to identify one or two interesting facts to share with the class.

Name		

Comparing Characters Worksheet

Fill in the chart below with details from the story.

	Diana	Li
Family life		
Actions and activities		
Thoughts and feelings		
Physical traits		
Interactions with other characters		
How she got to the island		

Launching Rockets

pp. 19-24, Biography

Teach students about the elements of biography using this article about the inventor of the first liquid-fueled rocket.

Lexile Score: ~1150L



RESOURCES

• Elements of a Biography Worksheet

OBJECTIVES

- Students will read and analyze a biographical article
- Students will recognize the genre and key elements and characteristics of literary texts
- Students will focus on the practice of science

KEY VOCABULARY

- ascended (p. 19) went up, rose
- propulsion (p. 21) the force that moves something forward
- *thrust* (p. 21) a forward or upward push
- resistance (p. 22) a force that slows down a moving object by going against the direction in which the object is moving
- inefficient (p. 22) not capable of producing desired results without wasting materials, time, or energy

ENGAGE

Conversation Question: How does curiosity influence what people do?

Display the words who, what, when, where, why, how. Ask students to use these words to write questions about topics, people, or events they are curious about. Invite students to share their questions. Then tell students the next article is about a man whose curiosity led him to make important contributions to space exploration.

INTRODUCE VOCABULARY

Display the vocabulary words and read them aloud. Ask volunteers to explain the meanings of familiar words. Acknowledge correct meanings and then read the definitions aloud. Finally, have students work in pairs to find an antonym for each word. Ask students to share their antonyms with the class.

RFAD & DISCUSS

After students have read the article independently, use the questions below to discuss the story:

- 1. What impressed you most about Robert Goddard?
- 2. How did science fiction inspire Goddard?
- 3. How did curiosity influence Goddard's life?
- 4. How did Goddard feel about failure?

SKILL FOCUS: Elements of Biography

INSTRUCT: Remind students that a biography is a form of nonfiction in which the author communicates ideas about another person's life. Explain that biographers use facts, anecdotes, and quotes to convey information about a person's

- childhood
- family members
- education
- important influences (people or events)
- achievements and failures

Ask students to share examples of these elements in biographies they've read.

ASSESS: Have students work in pairs to fill in the chart on the *Elements of a Biography* worksheet. Then divide the class into groups to complete the activity at the bottom of the worksheet.

FXTFND

Science Have students conduct research to find the steps of the scientific method. Then have them write a short explanation of how Robert Goddard used these steps.

Name_____

Launching Rockets

Elements of a Biography		
Fill in the chart using details from "Launching Rockets." Then get together with classmates to complete the activity below.		
Childhood		
Family members		
Schooling		
Important influences		
Achievements		
Failures		
Important contributions		

Group Activity: Based on the information above, identify three of Robert Goddard's character traits. Explain which details support your ideas.